KV-M2150D/M2151D

SERVICE MANUAL

AEP Model

KV-M2150D

Chassis No. SCC-D85L-A

KV-M2151D

Chassis No. SCC-D85K-A



BE-2A chassis

MODELS OF TH	E SAME SERIES
KV-M2150D/M2151D	KV-M1420D
KV-M2140D/M2141D	KV-M1430D/M1431D
KV-M1620D	

SPECIFICATIONS

[KV-M2150D/M2151D]

Television system B

stem B/G/H

Color system

PAL/SECAM

Channel coverage

VHF: E2-E12, S1-S20

UHF: E21-E69

Picture tube

HI-BLACK TRINITRON

Approx. 55 cm (21 inches)

(Approx.51cm picture measured diagonally)

100° degree deflection

Inputs

Ö- 21-pin connector: CENELEC standard

RGB input

VG-A Audio/Video input jacks: phono jacks

⊕ S-Video input jack

Outputs

Headphones jack: minijack

21-pin connector: TV output

Sound output

6 W (Music)

Power consumption 70.5Wh (KV-M2150D)

73.3Wh (KV-M2151D)

Dimensions

Approx. 510x465x490 mm (w/h/d)

Weight

Approx. 24 kg

[RM-826]

Remote control system infrared control

Power requirements

3V dc

2 batteries IEC designation

R6 (size AA)

Dimensions

Weight

Approx. 75×221×23mm (w/h/d) Approx. 230g including batteries

Accessories supplied

IEC designation R6 batters (2)

Supplied accessories

RM-826 Remote Commander (1)

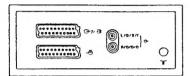
IEC designation R6 batteries (2)

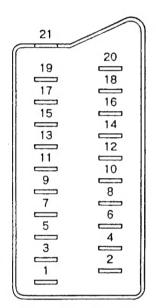
Design and specifications are subject to change without notice.



TRINITRON® COLOR TV

21 pin connector (--;; , -; -; 2/--; 3)





Pin No.	1	2	Signal	Signal level
1	0	0	Audio output B (right)	Standard level: 0.5Vrms Output impedance: Less than 1kohm*
2	0	0	Audio input B (right)	Standard level: 0.5Vrms Input Impedance: More than 10kohms ⁴
3	0	0	Audio output A (left)	Standard level; 0.5Vrms Output impedance; Less than 1kohm ⁴
4	0	0	Ground (audio)	
5	0	0	Ground (blue)	
6	0	0	Audio Input A (left)	Standard level: 0.5Vrms Input Impedance: More than 10kohms*
7	0	•	Blue input	0.7V ± 3dB, 75ohms, positive
8	0	0	Function select (AV control)	High state (9.5 – 12V): Part mode Low state (0 – 2V): TV mode Input impedance: More than 10kohms Input capacitance: Less than 2 nF
9	0	0	Ground (green)	
10	0	0	Open	
11	0	•	Green	Green signal: 0.7V ± 3dB, 75ohms, positive
12	0	0	Open	
13	0	0	Ground (red)	
14	0	0	Ground (branking)	
15	0	-	Red Input	0.7V ± 3dB, 75ohms, positive
15	-	0	(S signal) croma input	0.3V ± 3dB, 75ohms, positive
16	0	•	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input Impedance: 75ohms
17	0	0	Ground (video output)	
18	0	0	Ground (video Input)	
19	0	0	Video oulput	1V ± 3dB, 75ohms, positive Sync: 0.3V (- 3, +10dB)
20	0	-	Video Input	1V ± 3dB, 75ohms, positive Sync: 0.3V (- 3, +10dB)
20	-	0	Video Input/Y (S signal)	1V \pm 3dB, 75ohms, positive Sync: 0.3V ($-$ 3, +10dB)
21	0	0	Common ground (plug	, shield)

O connected • unconnected (open)

* at 20Hz - 20kHz

4 pin connector (🕙)

Pin No.	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB, 75ohms, positive Sync; 0.3V : 4 de
4	C (S signal) input	0.3V ± 3dB, 75ohms, positive

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CAUTION

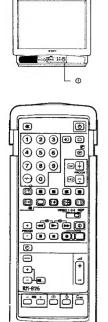
SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

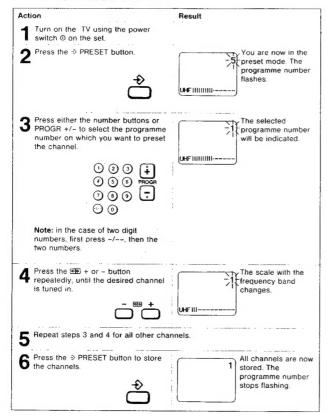
SECTION 1 **GENERAL**

1-1. PRESETTING OF CHANNELS



Before viewing the TV programmes your need to preset TV channels. There are 60 spaces available for storing these channels. TV stations broadcast their channels at certain frequencies. You must preset these channels to programme numbers on the TV Slide open the full-function side of the Remote Commander to reveal preset

Automatic presetting of channels



How to skip programmes

0

0

€

1

0

⊕1

0

RH-826

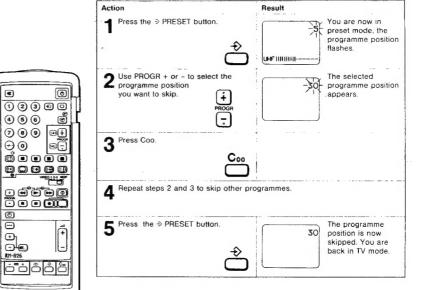
4 5 6

6 • • •

60000

00000

Since you have 60 programmes at your disposal, you may want to skip vacant programme positions. This means that they are skipped when you press the PROGR +/- buttons.



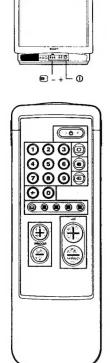
How to fine tune a channel manually

If the reception of a stored channel is not satisfactory, you can fine tune the channel

Action	Result
Press the ⊕ + or - button until the reception is good.	The channel is now fine tuned.
_ +	

Note: By pressing the respective programme number the automatic fine tuning will be restored.

1-2. BASIC TV OPERATION



This section introduces you to the basic control functions which are available on the TV set and on the simple side of the Remote Commander.

How to turn the TV on and off

Action	Result
Turning on	
Press the power switch © on the set.	The TV will turn on. Note: If the screen remains blank, the TV may be in standby mode. In this case, press ©.
Turning off	
A Temporarily Press ©.	The TV is now in standby mode. Press ○ or any number button to return to TV mode.
B Completely	
Press the power switch ①.	The TV will turn off.

How to select programmes

Before selecting programmes make sure that you have preset channels.

Action	 Result
Press PROGR +/- or the respective number button. Note: In the case of two digit numbers first press -/ and then the two number buttons.	The selected programme is displayed

On the set:

Press the + or - button for programme selection.

How to adjust the volume

Action	Result
Press ⊿ + or	The volume markers will appear and the volume is adjusted accordingly.

On the set

Press

until the

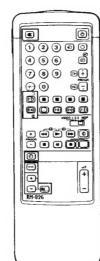
symbol is displayed, then adjust with the +/- buttons.

How to use additional functions

Viewing of Teletext: (anly for KV-M2151D)
Press ® I Ø. To return to TV mode, press ○.
Viewing of the video input:
Press ⊕. To return to TV mode, press ○.

1-3. ADVANCED TV OPERATION





This section introduces you to the advanced control functions which are available on the full function side of the Remote Commander.

How to adjust the picture

Although the picture has been adjusted at the factory, you might want to adjust if to your own taste. For modifications please follow the steps:

Action	Result
Press button ⊕ repeatedly, until the desired item is displayed (① contrast, ② colour intensity, ○ brightness).	The symbol and the level indicator for the selected item is displayed.
Press button + or	The picture item is adjusted.

On the set:

*Press button e repeatedly in order to select the desired item, then adjust with button + or -.

To return to factory set levels:

Press the *** button.

How to use the Sleep Timer

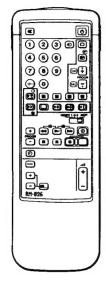
You can select a time after which the set goes automatically into standby mode. Press button @ repeatedly until the desired time is displayed on the screen (30, 60, 90 minutes or 0 for cancelling the request).

Other functions

How to	Action	The resume normal picture/sound
Display the programme number.	Press ①.	Press ⊕ again.
Mute the sound.	Press &	Press ≪ again.
Request the time (only if teletext is available).	Press O.	Press ⊙ again.

1-4. TELETEXT OPERATION (KV-M2151D ONLY)

TV stations broadcast teletext programmes via the TV channels. To receive teletext programmes, use the buttons indicated in green on the full function side of the Remote Commander. With the simple side of the Remote Commander only the basic operation is possible.



How to view the teletext

Actio	on	Result	
1	Select the channel which carries the teletext service you wish to view.	The channel changes on the screen.	
2	Press @19.	The teletext service appears. If the teletext signal is not broadcast pt00 is displayed.	
3	input three digits for the page number using the number buttons. Note If you make a mistake, type in any three digits, then re-enter the correct page number.	The numbers are entered on the screen. The requested page will appear in a few seconds.	
	To return to the TV mode: Press ○.		
	To change the teletext channels: First press O to return to TV mode, th	en repeat steps 1 to 3.	

Note

If the signal of the TV channel is weak, teletext errors may often occur. The \Box has no function on this set.

How to use the Advanced Features of Teletext

How	Action	Result (on-screen display)
Request the index page.	Press ⓓ (INDEX).	The index page appears.
Access the next or preceding page.	Press ⊕ (PAGE +) or ⊕ (PAGE -).	P201 The next or preceding page appears.

How to	Action	Result
Superimpose the teletext display on the TV programme	Press ® ₱ once if you are in text : mode or press ® ₱ twice if in TV mode To return to the normal teletext display press ® ₱ again.	The teletext displays are superimposed on the TV programmes.
Prevent a teletext page from being updated or changed.	Press ⊕ (HOLD) To resume normal teletext reception, press ⊕ Ø (TEXT/MIX).	The HOLD symbol ⊕ appears on the screen and the chosen sub-page is held until you cancel.
Enlarge the teletext display.	Press ® once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.	ward weather
Revealed concealed information (e.g. answers to a quiz).	Press (1) (REVEAL) Press again to conceal the information.	The information is revealed.
Watch the TV programme while	1. Request the new page.	The numbers are entered.
waiting for a requested page to be displayed.	2. Press @ (TEXT CL).	The TV programme is displayed and the requested page number and other teletext data appear at the top of the screen.
	3. When the requested page has been captured, the page number remains and the other data disappears.	P201
	4. Press ⊕ f to view this page.	The requested page is displayed

Some of the features may not be available depending on the Teletext service.

How to use the FASTEXT feature

FASTEXT feature allows you to access pages quickly with one key operation. When a FASTEXT page is broadcast, a colour coded menu appears at the bottom of the screen. Each coloured prompt corresponds to the coloured buttons on either side of your Remote Commander.

Operation

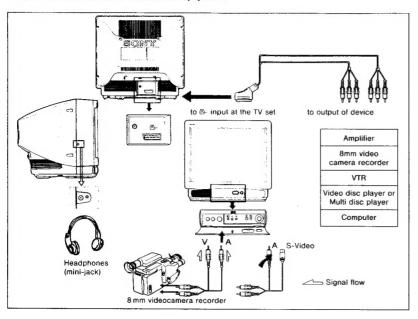
Action	Result
Press on the coloured buttons which corresponds to the coloured prompt on the teletext.	The selected teletext page appears.

Note

Correct FASTEXT operation depends on the necessary signals sent from the TV station.

1-5. OPTIONAL CONNECTIONS/OPERATIONS

How to connect additional Audio/video equipment



How to view the Video input signal

Press button ⊕ in order to select the desired input mode (⊕ for Audio/video signals from 21-pin EURO connector ⊕ or from the video/audio connectors ∨ ⊕ A on the front: ⊕ for S-video signals from the S-video (4-pin DIN) connectors on the front). Press button ⊕ to return to TV mode.

On the set:

Press button \odot - once, the symbols \odot , \bigcirc , \odot , will appear on the screen, then press the + button to select the desired video input mode. Press \odot and + buttons again to return to TV-mode.

S-video input (Y/C input)

Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals. Separating the Y and C signals prevents them from interfering with one another, and therefore improves picture quality (especially luminance). This TV is equipped with one S-video input jack through which these separated signals can be input directly.

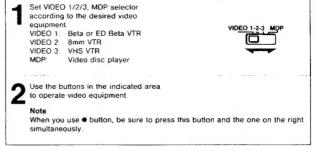
Notes

- When you have Audio/video equipment connected to both the A/V connectors and the 21-pin terminal, make sure that both are not switched on at the same time, otherwise the picture could be incomplete.
- · In case of sound and picture distortions move the VTR away from the TV set.

1-6. ADDITIONAL REMOTE COMMANDER OPERATION

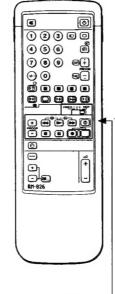
How to Control Other Sony Video Equipment

By switching the VIDEO 1/2/3, MDP selector, you can operate most Sony video equipment (Beta VTR, 8mm VTR, VHS VTR, and video disc player).

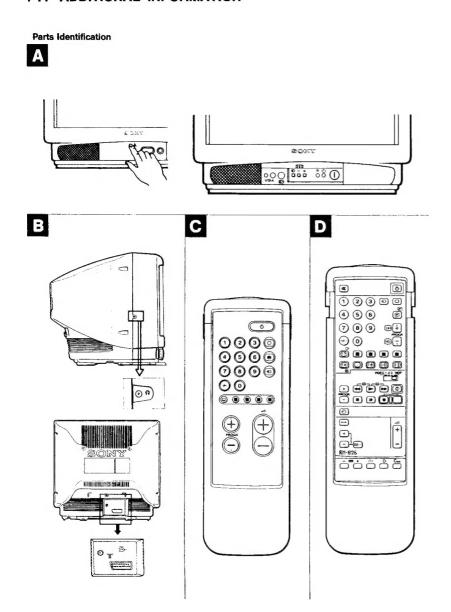


Notes

- If your video equipment is furnished with COMMAND MODE selector, set the selector to the same position as the VIDEO 1/2/3, MDP selector on the supplied Remote Commander.
- If the equipment does not have a certain function, the corresponding button on the Remote Commander will not work.



Buttons to operate other Sony Video equipment



This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information.

Sign Name	Main power switch
Standby indicator Input jacks (Video/Audio/S-Video) Function selector (Programme/ volume/input) Adjustment buttons for function selector TV set — Rear Sign Name Headphones jack 21-pin Euro-AV connector (RGB/ video input, TV output) TC Aerial terminal (IEC type) Remote Commander — simple side Sign Name Input mode selector Teletext button Fastext buttons TV mode selector Standby button 12.3.4.5, 8,9, and 0 Double-digit entering button	
Input jacks (Video/Audio/S-Video) Function selector (Programme/ volume/input) Adjustment buttons for function selector TV set — Rear Sign Name Headphones jack 21-pin Euro-AV connector (RGB/ video input, TV output TΓ Aerial terminal (EC type) Remote Commander — simple side Sign Name Input mode selector Teletext button Fastext buttons TV mode selector U Standby button 12.3.4.5, 8.9, and 0 Double-digit entering button	Standby indicator
(Video/Audio/S-Video) Function selector (Programme/ volume/input) Adjustment buttons for function selector TV set — Rear Sign Name Headphones jack 21-pin Euro-AV connector (RGB/ video input, TV output TΓ Aerial terminal (EC type) Remote Commander — simple side Sign Name Input mode selector Teletext button Fastext buttons TV mode selector U Standby button 12.3.4.5. 8.9. and 0 Double-digit entering button	
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volume/input) Adjustment buttons for function selector TV set — Rear Sign Name ☐ Headphones jack 21-pin Euro-AV connector (RGB/ video input, TV output ☐ Aerial terminal (IEC type) Remote Commander — simple side Sign Name ☐ Input mode selector ☐ Teletext button ☐ Ty mode selector ☐ Standby button ☐ 1,2,3,4,5,8,9, and 0 ☐ Double-digit entering button	Function selector
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output Aerial terminal (IEC type) Remote Commander — simple side Sign Name □ Input mode selector □ Telelext button □ TV mode selector □ Standby button 12.3.4.5, 8.9, and 0 Number buttons -/ Double-digit entering button	
Remote Commander — simple side Sign Name Input mode selector Telelext button Ty mode selector Standby button 1,2,3,4,5, 8,9, and 0 Number buttons Double-digit entering button	
Remote Commander — simple side Sign Name Input mode selector Telelext button Ty mode selector Standby button 1,2,3,4,5, 8,9, and 0 Number buttons Double-digit entering button	Aerial terminal
Remote Commander — simple side Sign Name Input mode selector Teletext button To mode selector Standby button 1,2,3,4,5, 8,9, and 0 Number buttons Double-digit entering button 1+/- Volume control	
Sign Name Input mode selector Telelext button To mode selector To standby button 1,2,3,4,5, 8,9, and 0 Number buttons Double-digit entering button 1,4,4, Volume control	
Input mode selector Telelext button Ty mode selector Standby button 1.2,3,4,5, 8,9, and 0 Double-digit entering button 1.4.4- Volume control	nander – simple side
selector Telelext button Fastext buttons TV mode selector Standby button 1.2,3,4,5, 8,9, and 0 Number buttons Double-digit entering button Volume control	Name
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TV mode selector Standby button 1.2.3.4.5. 8.9. and 0 Double-digit entering button 1.4 Volume control	Teletext button
	Fastext buttons
1.2.3.4.5. 8.9. and 0 Number buttons Double-digit entering button Volume control	TV mode selector
.8,9, and 0 Number buttons -/ Double-digit enlering button -/ Volume control	Standby button
.8,9, and 0 Number buttons -/ Double-digit enlering button -/ Volume control	
entering button 1+/- Volume control	Number buttons
entering button Volume control	Double-digit
	entering button
ROGR +/-	Volume control

	ander - full function side
Sign	Name
<₩	Mute on/off button
Q	Standby button
1,2,3,4,5, 6,7,8,9, and 0	Number buttons
Ð	Input mode selector
0	TV power on/TV mode selector button
1	Teletext button
-/	Double-digit entering button
0	Request time display
780 100	Teletext operation buttons
	Fastext buttons
•	On-screen display button
9	Sleep timer
->+ -	Picture adjustment reset button
△ +/-	Volume control
PROGR +/-	Programme selector
(III) +/-	Picture controls
IDEO 1/2/3, MDP	Video equipment selector
44 >>	Video equipment operation bultons
Coo	Programme number clear button
⇒	Channel preset/store button
_ { } +	Tuning buttons

Troubleshooting

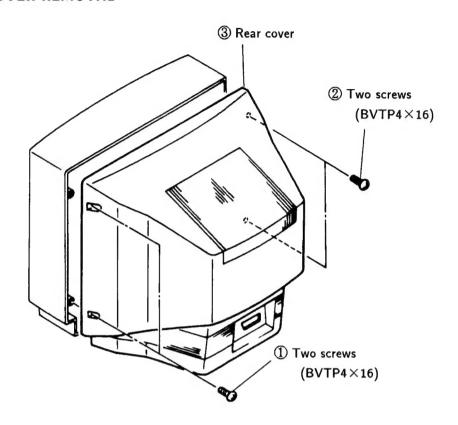
Here are some simple solutions to the problems which may affect the picture and sound.

Problem	Checking and solution
No picture (screen not lit), no sound	Connect the set to a working outlet. Press the power switch Φ. If the standby indicator shines red, press the TV button on the Commander □. Check the aerial connection.
Poor or no picture (screen not lit), but sound good	 Adjust ①, ○, and ④ by pressing the + or - button (after selecting with the ⊕ button.
Good picture but no sound	Press △ +. If ∢ is displayed on the screen, press ⋄ on the Remote Commander.
No colour for colour programmes	Adjust with the + button after selecting with the button. Press →
Snow and noise	Check the aerial connections.

-9-

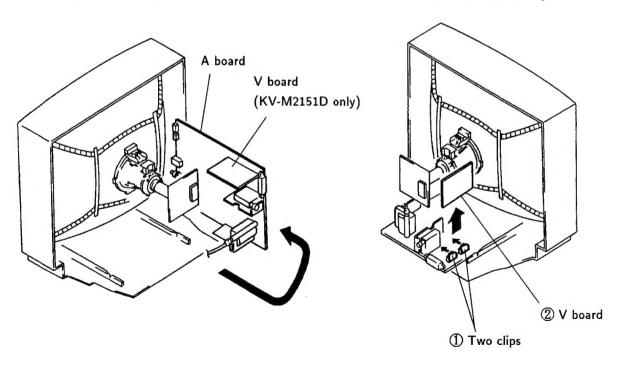
SECTION 2 DISASSEMBLY

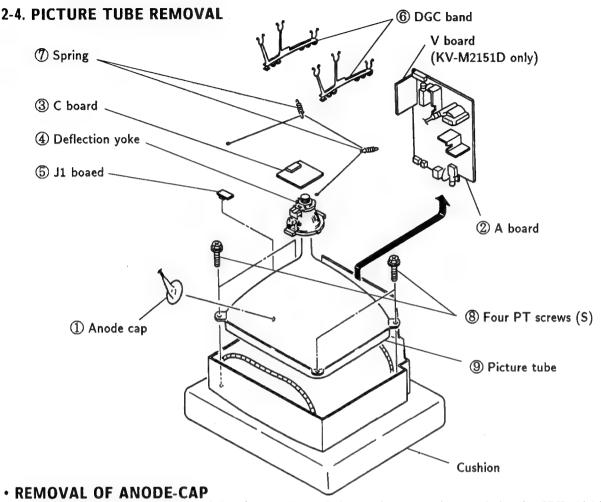
2-1. REAR COVER REMOVAL



2-2. SERVICE POSITION

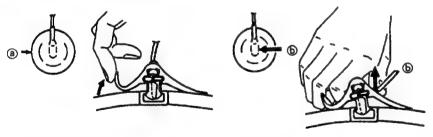
2-3. V BOARD REMOVAL (KV-M2151D only)



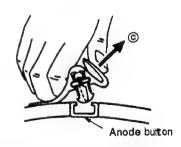


NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT chield or carbon painted on the CRT, after removing the anode.

REMOVING PROCEDURES



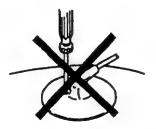
- ① Turn up one side of the rubber cap in ② Using a thumb pull up the rubber cap the direction indicated by the arrow @.
 - firmly in the direction indicated by the arrow (b).

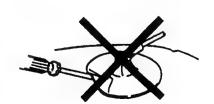


When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ©.

HOW TO HANDLE AN ANODE-CAP

- Don't hurt the surface of anode-caps with sharp shaped material!
- Don't press the rubber hardly not to hurt inside of anode-caps! A material fitting called as shatter-hook terminal is built in the rubber.
- Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted. The controls and switch below should be set as follows unless otherwise noted:
 - CONTRASTcontrol ······ 80%(or Normal by commander)

☼ BRIGHTNESS control 50%

Perform the adjustments in order as follows:

Preparation:

- Set the side of the unit with the PICTUE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser..

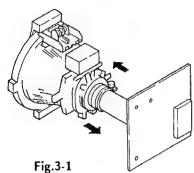
3-1. BEAM LANDING

Demagnetize with a degausser

1. Input a raster signal with the pattern generator.

CONTRAST BRIGHTNESS } normal

- 2. Turn the raster signal of the pattern generator to red.
- Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides evenly. (Fig.3-1 - 3-3)
- 4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig.3-1)
- 5. Switch over the raster signal to blue and green confirm the condition.
- When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- 7. When landing at the corner is not right, adjust by using the disk magnets. (Fig.3-4)



- 1. Beam Landing
- 2. Convergence
- 3. Focus
- 4. Screen (G 2) and White Balance

Note: Test Equipment Required.

- 1. Color bar/Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

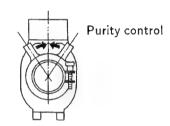


Fig.3-2

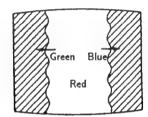
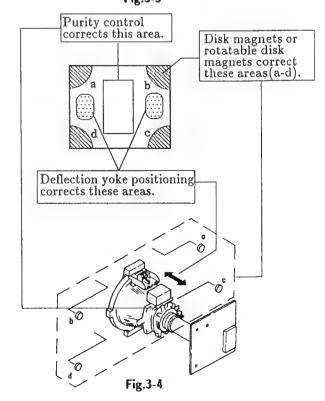


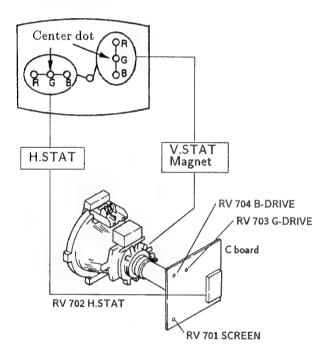
Fig.3-3



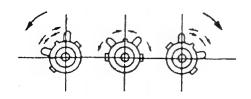
3-2. CONVERGENCE

Preparation:

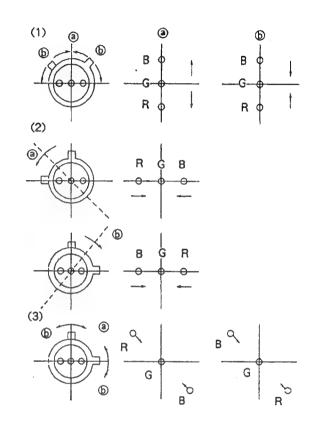
- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.
- (1) Horizontal and Vertical Static Convergence



- 1. Adjust H.STAT VR to converge red, green and blue dots the in center of the screen. (Horizontal movement)
- 2. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)
- 3. If the red, green and blue dots do not converge on the center of screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)
- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4. When the V.STAT magnet is moved in the direction of arrow (a) and (b), red, green and blue dots move as shown below.

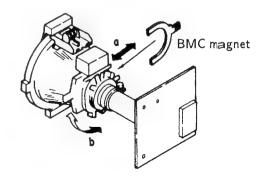


If the red and blue dot do not converge with green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H.static convergence.

Rotate BMC magnet (b) to correct insufficient V.static convergence.

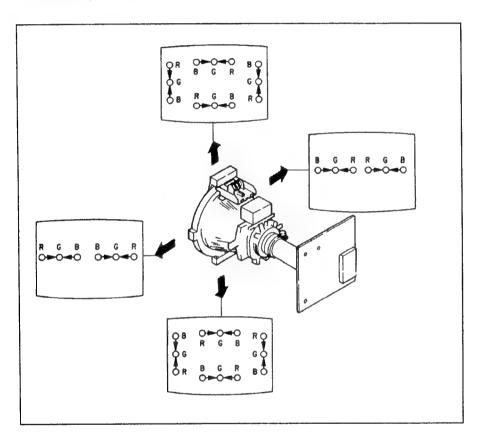
In either case, repeat Beam Landing Adjustment.

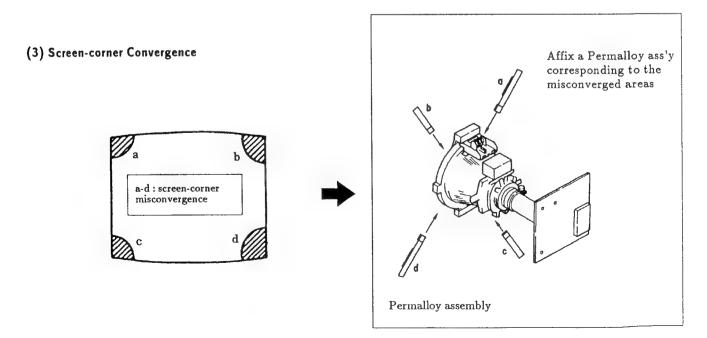


(2) Dynamic Convergence Adjustment Preparation:

- Before starting perform Horizontal and Vertical static convergence Adjustment.
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

- 3. Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.

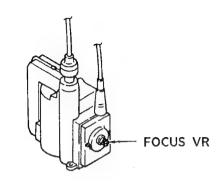




SECTION 4 CIRCUIT ADJUSTMENTS

3-3. FOCUS

Adjust FOCUS so that the whole screen is in best focus.

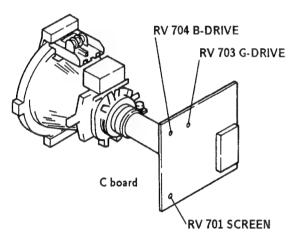


White Balance Adjustment

- 1. Input all-white signal from the pattern generator.
- 2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
- 3. Adjust the following using RV 704 (B DRIVE) and RV 703 (G DRIVE)

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

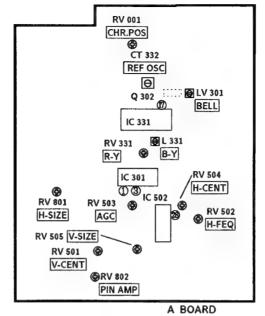
3-4. SCREEN (G 2) and WHITE BALANCE



Screen (G 2) Setting

- 1. Input dot signal from the pattern generator.
- 2. Set the picture BRIGHTNESS control to minimum
- 3. Apply 170 V DC to the cathodes of R,G and B from an external power source.
- 4. While watching the picture, adjust the G2 control RV701 (SCREEN) immediately before fly-back line disappears.

4-1. A BORAD ADJUSTMENTS

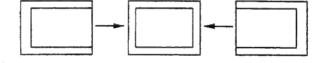


-Component side-

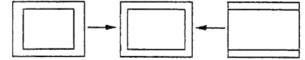
TU AGC Adjustment (RV 503)

- 1. Tune in air signal.
- 2. Adjust AGC VR (RV 503) so that snow-noise and cross-modulation just disappear from the picture.

RV 504 H.CENT (HORIZONTAL CENTER)

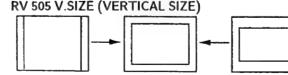


RV 801 H.SIZE (HORIZONTAL SIZE)

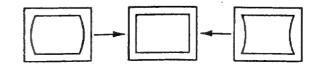


RV 501 V.CENT (VERTICAL CENTER)



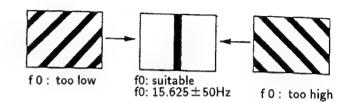


RV 802 PIN AMP (PINCUSHION AMPLIFIER)



H.FREQ Adjustment (RV 502)

- 1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor (100 $\mu/16$ V) between pin® and GND of IC 502.
- 2. Adjust RV 502 (H.FREQ) to stop scrolling of the picture in the horizontal direction.
- 3. After adjustment, remove the electrolytic capacitor.

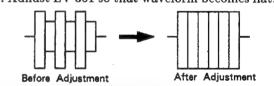


REF OSC 8.8 MHz Adjustment (CT 332)

- 1. Input a PAL COLOR BAR pattern.
- 2. Short circuit between pin of IC 331 and ground.
- 3. Adjust CT 332 to obtain color synchronization.
- 4. Remove the jumper wire from IC 331.

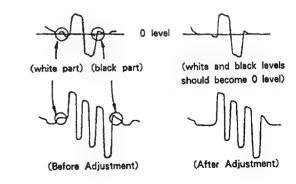
BELL FILTER Adjustment (LV 301)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to rhe Q 302 emitter.
- 3. Adhust LV 301 so that waveform becomes flat.



SECAM DISCRI Adjustment (RV 331 R-Y L 331 B-Y)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to pin ① of IC 301.
- 3. Adjust RV 331(R-Y) so that white and black parts of the waveform of pin 1 becomes 0 level.
- 4. Connect an oscilloscope to pin 3 of IC 301.
- 5. Adjust L 331(B-Y) so that white and black parts of the waveform of pin 3 becomes 0 level.



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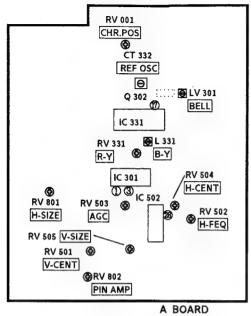
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SECTION 4 CIRCUIT ADJUSTMENTS

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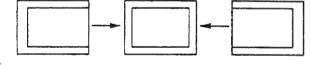


-Component side-

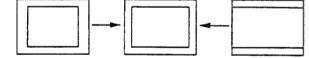
TU AGC Adjustment (RV 503)

- 1. Tune in air signal.
- 2. Adjust AGC VR (RV 503) so that snow-noise and cross-modulation just disappear from the picture.

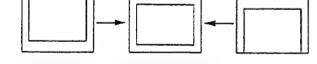
RV 504 H.CENT (HORIZONTAL CENTER)



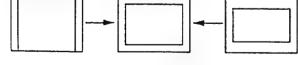
RV 801 H.SIZE (HORIZONTAL SIZE)



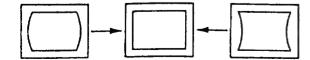
RV 501 V.CENT (VERTICAL CENTER)



RV 505 V.SIZE (VERTICAL SIZE)

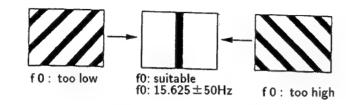


RV 802 PIN AMP (PINCUSHION AMPLIFIER)



H.FREQ Adjustment (RV 502)

- 1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor (100 $\mu/16$ V) between pin and GND of IC 502.
- 2. Adjust RV 502 (H.FREQ) to stop scrolling of the picture in the horizontal direction.
- 3. After adjustment, remove the electrolytic capacitor.

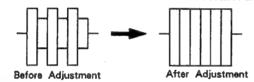


REF OSC 8.8 MHz Adjustment (CT 332)

- 1. Input a PAL COLOR BAR pattern.
- 2. Short circuit between pin of IC 331 and ground.
- 3. Adjust CT 332 to obtain color synchronizetion.
- 4. Remove the jumper wire from IC 331.

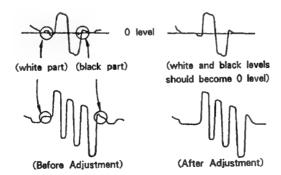
BELL FILTER Adjustment (LV 301)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to rhe Q 302 emitter.
- 3. Adhust LV 301 so that waveform becomes flat.



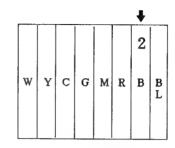
SECAM DISCRI Adjustment (RV 331 R-Y L 331 B-Y)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to pin ① of IC 301.
- 3. Adjust RV 331(R-Y) so that white and black parts of the waveform of pin ① becomes 0 level.
- 4. Connect an oscilloscope to pin 3 of IC 301.
- 5. Adjust L 331(B-Y) so that white and black parts of the waveform of pin 3 becomes 0 level.

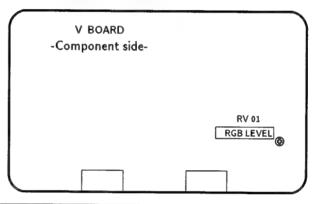


CHARACTER POSITION Adjustment (RV 001)

- 1. Input PAL COLOR BAR pattern.
- 2. Adjust RV 001 to position the charcter display at the point indicated by the arrow below.



4-2. V BOARD ADJUSTMENT (KV-M2151D only)

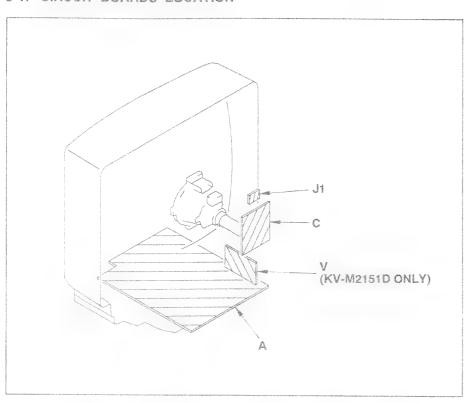


RGB LEVEL Adjustment (RV 01)

- 1. Set PICTURE to maximum.
- 2. Adjust RV01 till the RGB output becomes maximum.

SECTION 5 DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytic and tantalums.
- · All resistors are in ohms. $k\Omega = 1000 \Omega$, $M\Omega = 1000 K\Omega$
- · Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm Rating electrical power 1/4 W

• monflammable resistor.

∴ internal component.
 : panel designation, or adjustment for repair.

 All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

___ : earth-ground. : earth-chassis.

• # : no mounted.

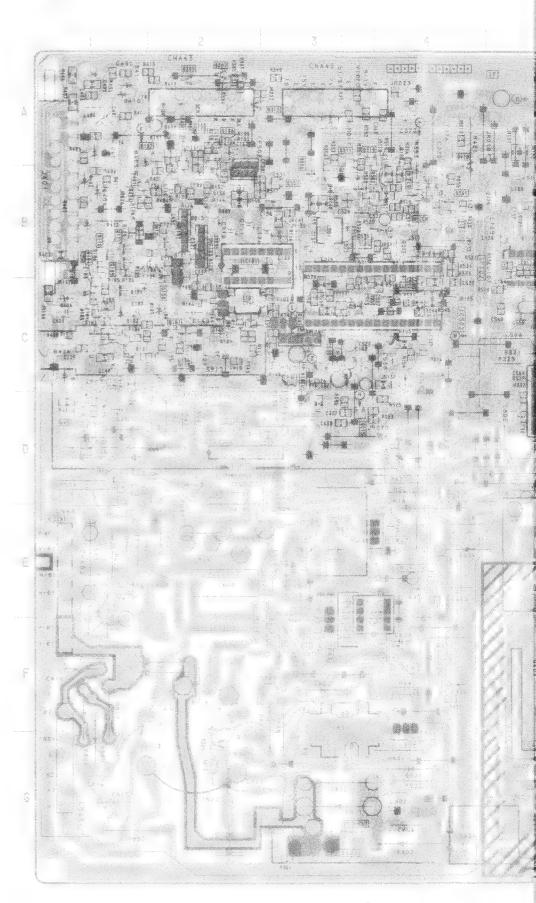
Note: The components identified by shading and mark number specified.

Reference i	nformatio	on
RESISTOR	: RN	METAL FILM
	: RC.	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

- Readings are taken with a color-bar signal input. no mark: with PAL color-bar signal received.
- (): with SECAM color-bar signal received. \bullet Readings are taken with a 10M Ω digital multimeter.
- » Voltage are do with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- 8 Circled numbers are waveform references.
- B+ bus.
- signal path. (RF)

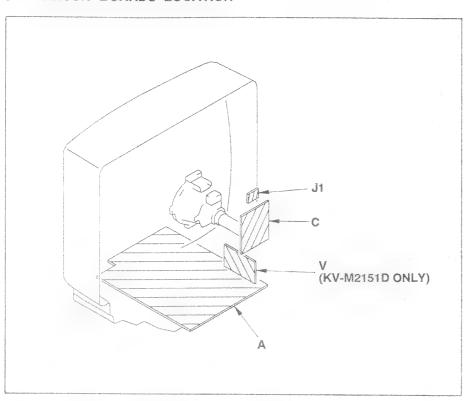
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	0002	E-10	01301	B-10	0305	B-6
	Đ004	0-9	01302	B-10	0307	D-6
	0007	B-8	01303	B-10	0310	A-3
	0008	0-10	01304	A-10	0311	Λ-3
	D009	B-8	01305	A-10	3	3
	Đ011	E-8	01306	B-10	0401	B-1
	0020	B-8	01300	B-10	0457	D-1
	0110	C-5	01307	D-10	0504	C-3
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	D302				0601	G-5
	030Z	A-2 B-6	West of the second		0801	F-4
	0305				0802	11-3
	0303 0306	A-2 B-6	10001	C-9	0803	F-3
	0313	N-9	10002	0-9	01301	B-9
	0313 0321		10003	0-10	01302	B-10
	0321 0324	C-5 A-7	10004	E-9	01303	B-10
	U324 D333		10005	B-8	01304	A-10
	D333 9334	D-7	10102	B-5	01305	A-10
		B6	10201	F-8	01306	B-10
	0402	A-1	10301	Ð-5		į
	0403	B-1	10302	B-7		
	0404	B-1	10331	C-7	VARI/	
	0405	A-1	10501	0-2	RESIS	STOR
	D406	C-1	10502	0-4	87001	0-9
	8411	A-1	10601	G-5	RV331	D-5
	0417	Ð-1	10801	F-3	RY501	0-2
	0418	A-4	10802	E-4	RV502	B-4
	0426	0-1			RY503	C-4
1	8427	C-1			RV504	8-4
	0450	B-5			RVS05	0-2
11	0501	0-3	TRANS	ICTOD	RVBOI	F-4
1	0503	E-4	LINANO	HUICI	1	
1 (0504	G-2	0001	Ð-8	TOIL	
1	9519	C-8	0003	0-9	TRIM	MEH
11	0601	F-7	0004	0-10	CT332	C-7
1	D602	F-6	Q005	B-8		
1	0603	F-5	0006	0-3		
1	D604	E-4	0007	B-4		
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	0802	H-4	Q112	A-7		And we see that
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1 .	0807	F-3	0141	C-3		action as about
1	0000	E-3	Q302	C-7		-
	808	L				
	0808 0810	E-1	Q303	C-7		1107
-				C-7 B-6		To Part William comprise

- A Board



SECTION 5 DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms. $k\Omega = 1000 \Omega$, $M\Omega = 1000 K\Omega$
- · Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm Rating electrical power 1/4 W

• - : nonflammable resistor.

: internal component.

; panel designation, or adjustment for repair.

 All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

___ : earth-ground. : earth-chassis. # : no mounted.

Note: The components identified by shading and mark ♠ are critical for safety. Replace only with part

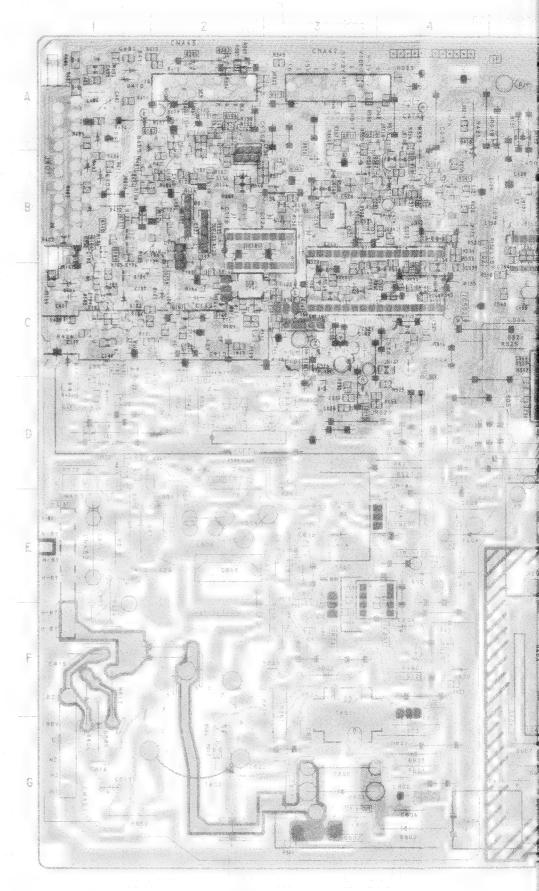
number specified.

Reference i	nformatio	on
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

- Readings are taken with a color-bar signal input. no mark: with PAL color-bar signal received.
- () : with SECAM color-bar signal received. ullet Readings are taken with a 10M Ω digital multimeter.
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- * Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- ***** : 8+ bus.
- Ifferior signal path (RF)

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-	0002	E-10	01301	B-10	0305	B-6	100
	0004	C-9	01302	B-10	0307	B-6	
	0007	B-8	01303	B-10	0310	A-3	-
	8000	Đ-10	01304	A-10	0311	A-3	40.00
	0009	B-8	01305	A-10	0401		2
	Đ011	E-8	01306	B-10	0457	B-1	
	0020	B-8	01307	B-10		D-1	-
	D110	C-5	01307	D-10	0504	C-3	
	0301	C-6			0505	D-3	-
	0302	A-2.			0601	G-5	200
	0303	B-6			0801	F-4	
	0305	A-2	10001		0802	41-3	-
	0305	B-6	10001	C-9 0-9	0803	F-3	
	0313	Λ-3	10002	0-9 0-10	01301	B-9	1
	0373	C+5	10003	E-9	01302	B-10	100
	0324	A-7	10005	B-8	01303	B-10	
	D333	0-7	10102	8-5	01304	A-10	
	0334	B-6	10201	F-8		A-10	
	0402	A-1	10301	Ð-5	01306	B-10	
	0403	B-1	10302	B-7			- Andrews
	0404	B-1	10331	C-7	VARI	A DI C	
	0405	A-1	10501	0-2			
	0406	C-1	10502	C-4	RESI	Children and the second second	1
	9411	A-1	10601	G-5		0-9	0.00
	0417	0-1	10801	F-3	RV331	D-6	The state of the s
	0418	A-4	10802	E-4	RV501	Ð-2	
	D426	6-1	10002	C - 1	RV502.	B-4	-
	0427	C-1		,	RV503	C-4	
	0450	B-S			RV504	B-4	
	0501	0-3			RV505	0-2	
	D503	E-4	TRANS	ISTOR	RVBOI	F-4	
	0504	G-2	0001				
	Ð519	C-8	0003	070: 0~9	TRIM	MER	
	960.1	F-7	0004	:D=10	CT332	C-7	
	D602	F-6	0005	B-8	0.1332	L-/	
	0603	F-5	0006	6-8			
	Ð604	E-4	Q007	B-4			
	0605	E-6	0015	0-3			
	D606	0-5	0016	0-10			
	0607	G-5	0017	E-9			
	0608	H-5	0019	D-10			
	D609	G-5	QQ20	Ð-8			
	0610	6-5	Q104	C-1			
	Ð611	F-4	0106	A-2		1	
	1080	G-3	0107	^-A-2		-	
	Ð802	H-4	Q112	۸-7		1	
-	0803	G-4	0114	D-5		1	
1	0805	G-1.	01-15	A-6			
	9806	F-1	Q123	A-2			
	£807	F-3	Q141	0-3			
	D808	E-3	0302	C-7			
	0180	E-1	Q303	C-7		1	
	1180	€-1	Q304	B-6		1	
	0820	F-4					

- A Board -

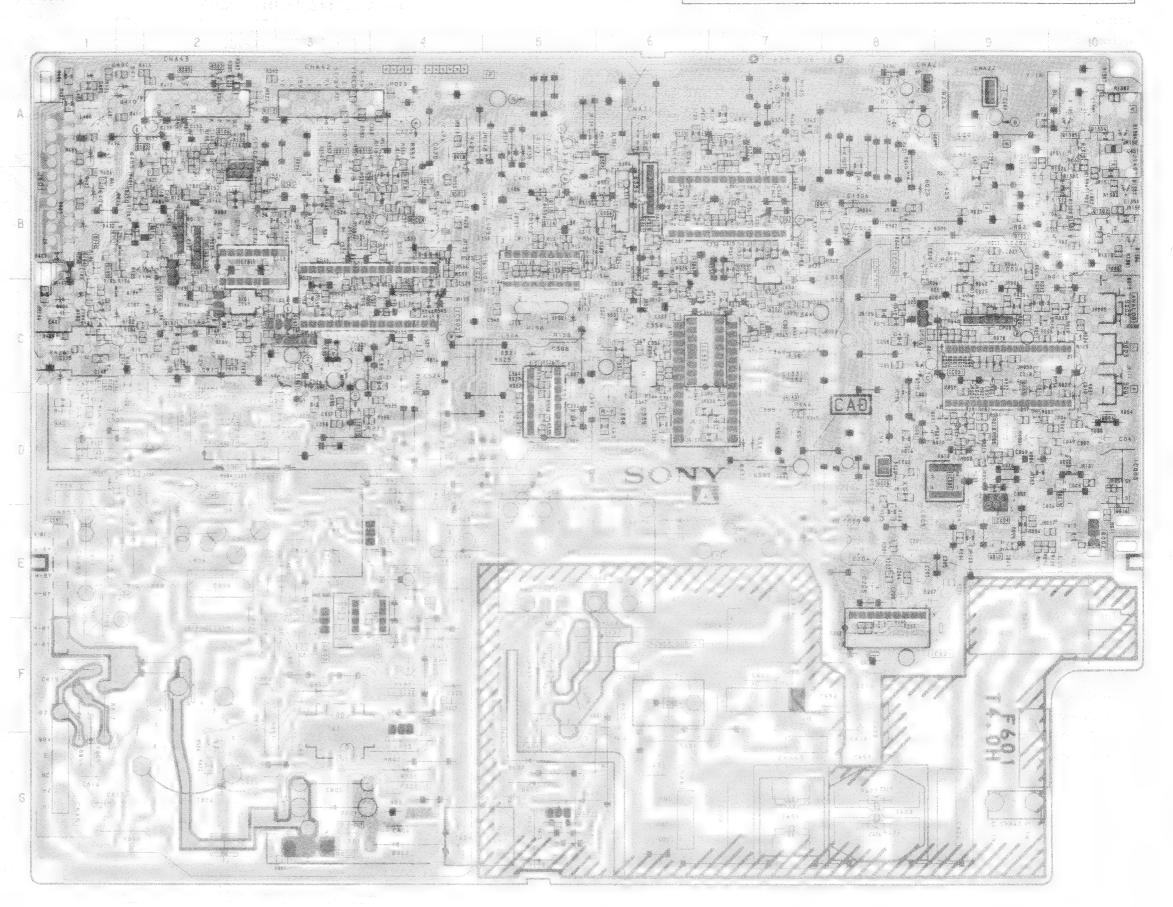


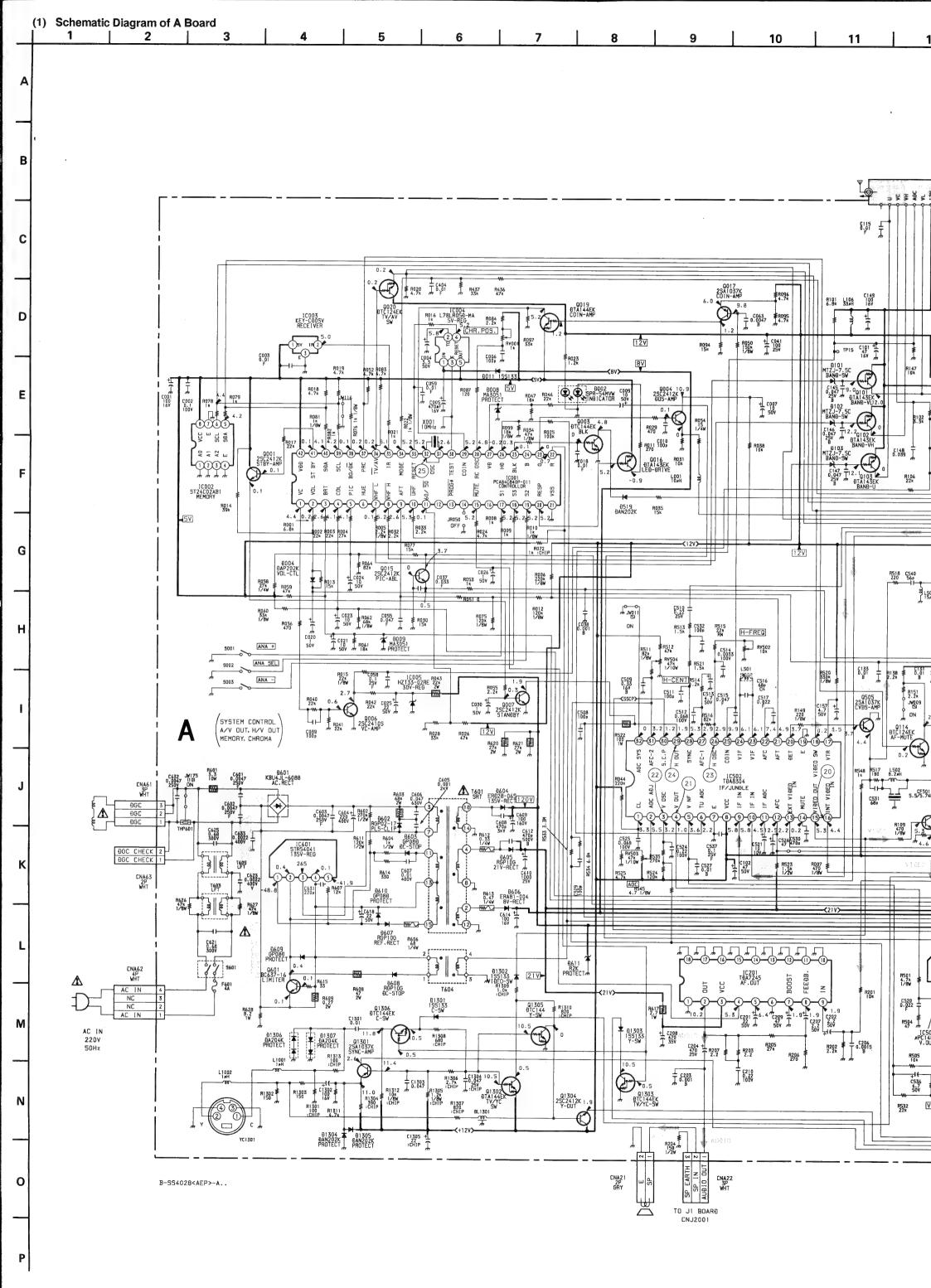
A SYSTEM CONTROL, A/V OUT, H/V OUT, MEMORY, CHROMA

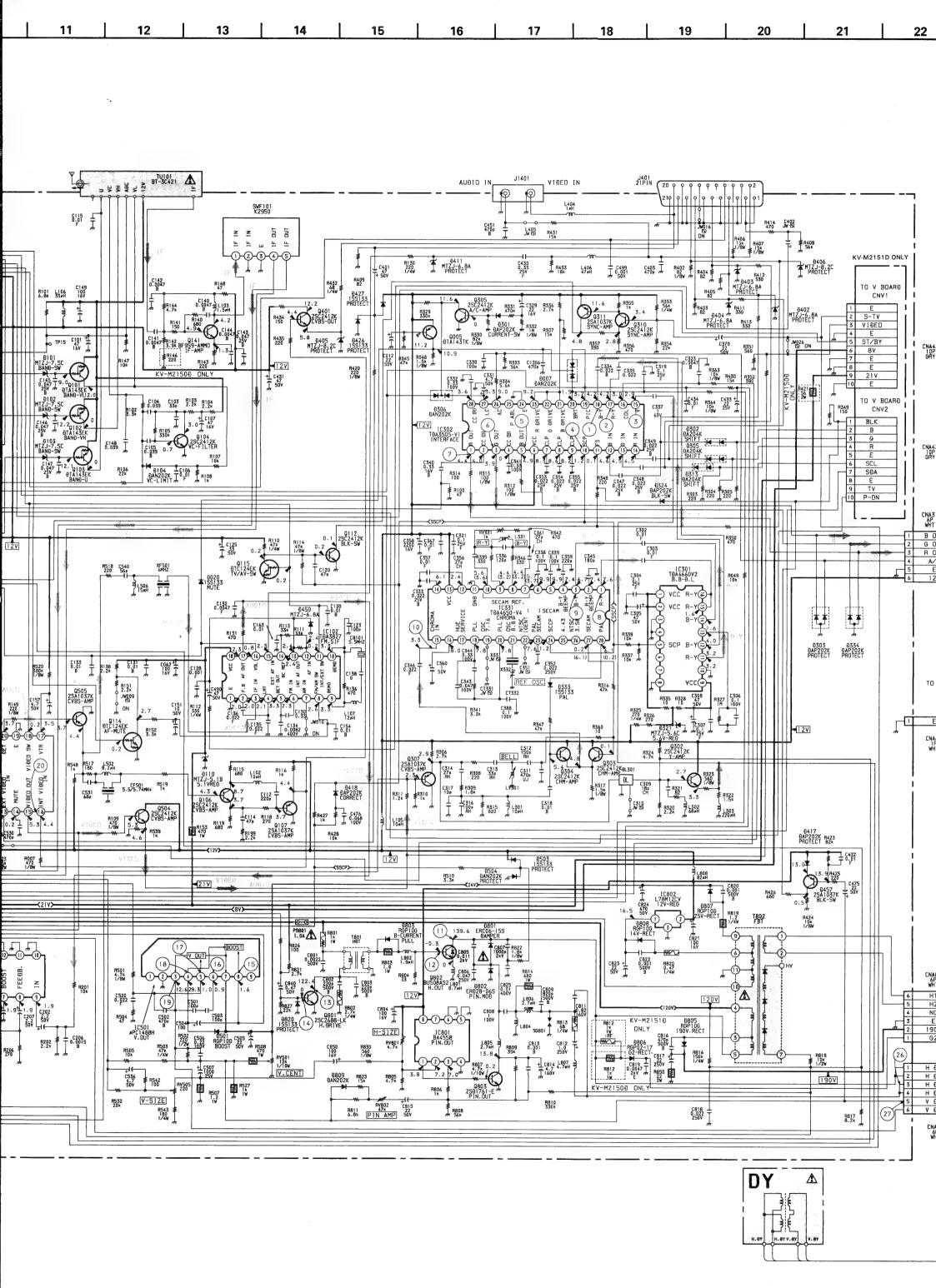
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

- A Board

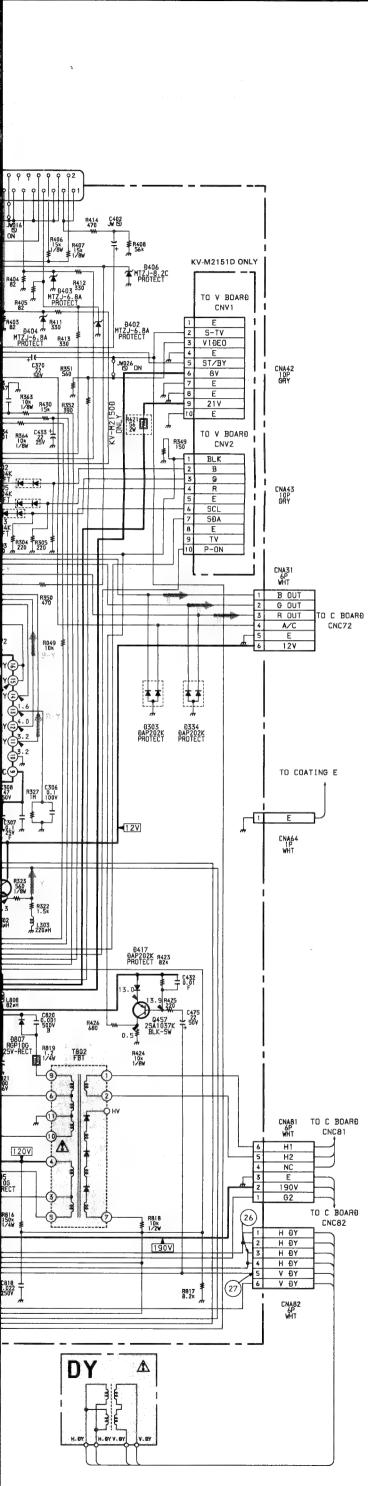
	e e e		
	ÐIOÐE	DIODE	TRANSISTOR
	0002 E-10	01301 B-10	0305 R-6
	8004 C-9	01302 B-10	Q307 D-6
	0007 B-8	D1303 B-10	0310 A-3
	0008 0-10	01304 A-10	Q311 A-3
	D009 B-8	01305 A-10	0401 B-1
7	0011 E-8	D1306 B-10	Q457 D-1
	8-8 B-8	01307 B-10	0504 C-3
	D110 C-5		Q505 B-3
	0301 C-6		Q601 G-5
	0302 A-2		0801 F-4
	0303 B-6	IC	0802 11-3
	0305 A-2	1C001 C-9	0803 F-3
	0306 B-6	10002 0-9	01301 B-9
	0313 A-3	10003 D-10	Q1302 B-10
	0321 C-S	10004 E-9	Q1303 B-10
	.0324 A-7	10005 B-8	01304 A-10
į.	D333 D-7	IC102 B-5	01305 A-10
	0334 B-6	IC201 F-8	01306 B-10
	D402 A-1	10301 8-5	
	0403 B-1	1C302 B-7	
	0404 B-1	10331 C-7	VARIABLE
	0405 A-1	IC501 B-2	RESISTOR
	0406 C-1	10502 C-4	RV001 0-9
	0411 A-1	1C601 G-5	RV331 D-6
	0417 D-1	1C801 F-3	RV501 0-2
	0418 A-4	IC802 E-4	RV502 8-4
	D426 C-1		RY503 C-4
- 1	0427 C-1		RV504 B-4
	0450 B-S		RV505 0-2
	0501 9-3	TOLLICIOTOR	
.	D503 E-4	TRANSISTOR	
	0504 G-2	Q001 9-8	
	0519 C-8	0003 C-9	TRIMMER
	0601 F-7	Q004 D-10	CT332 C-7
	0602 F-6	Q005 B-8	
1	.0603 F-5	0006 C-8	
1	Đ604 E-4	0007 B-4	and the late
	0605 E-6	0015 0-3	
	Đ606 Đ-5	0016 0-10	
	0607 G-5	Q017 E-9	
	0608 H-5	0019 0-10	
	D609 G-5	0020 D-8	
	0610 6-5	0104 C-1	
	0611 F-4	Q106 A-2	
	0801 G-3	Q107 A-2	
.	D802 H-4	Q112 A-7	
	0803 G-4	0114 B-5	
	0805 G-1	Q115: A-6	
American rate.	0806 F-1	Q123 A-2	The state of the s
	D807 F-3	Q141 C-3	
	D808 E-3	0302 C-7	
1	Đ810 E−1	Q303 C-7	
1	0811 E-1	0304 B-6	
	0820 F-4		
			A STATE OF THE PARTY OF THE PAR



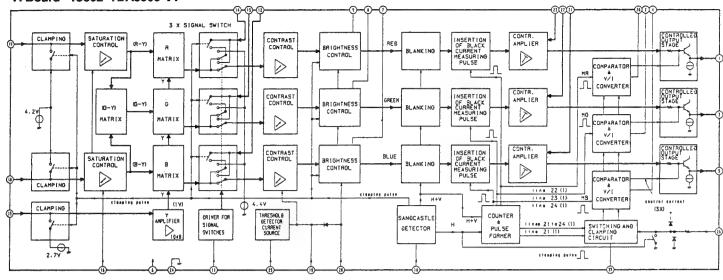




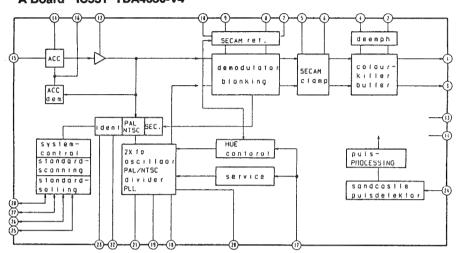




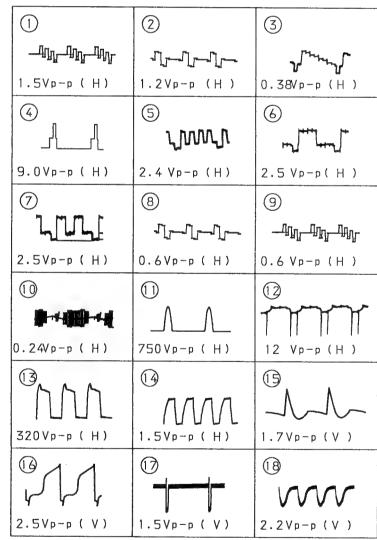




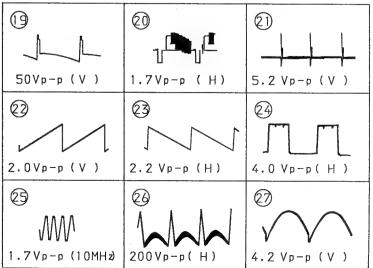
A Board IC331 TDA4650-V4

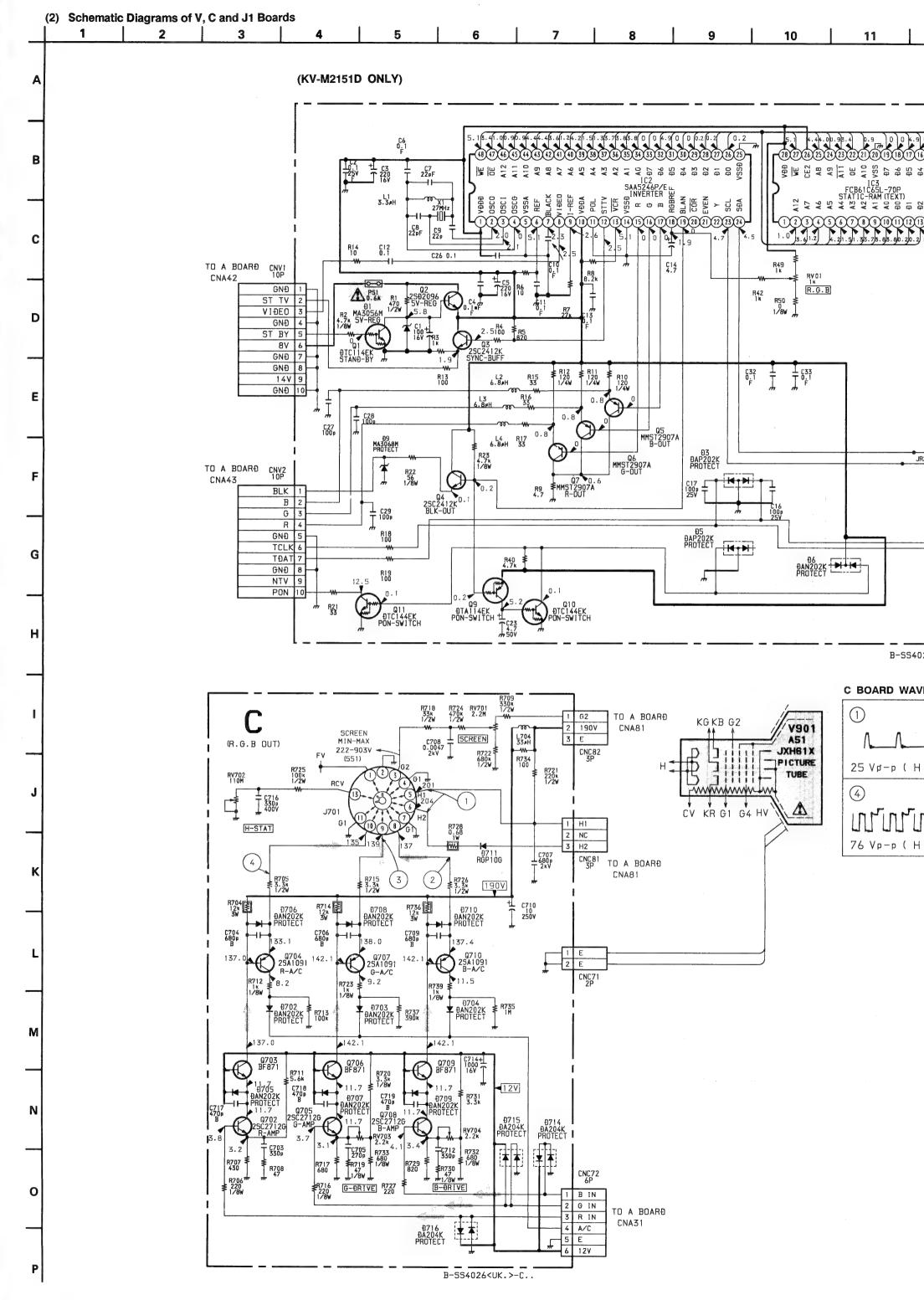


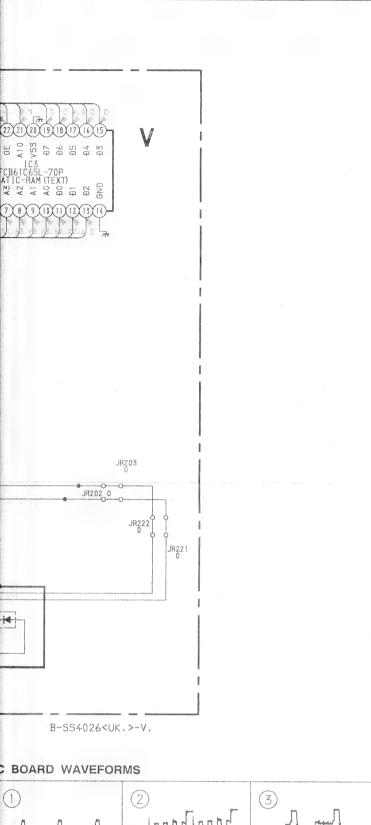
A BOARD WAVEFORMS



B-SS4030<ET.>-A<WAYELIST>-



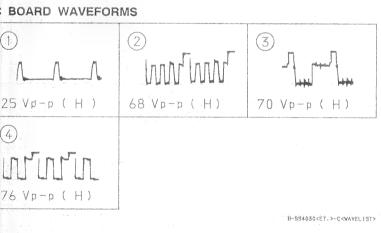


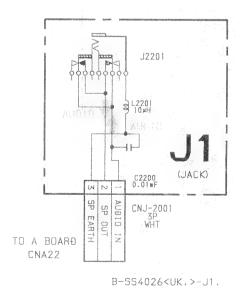


12

13

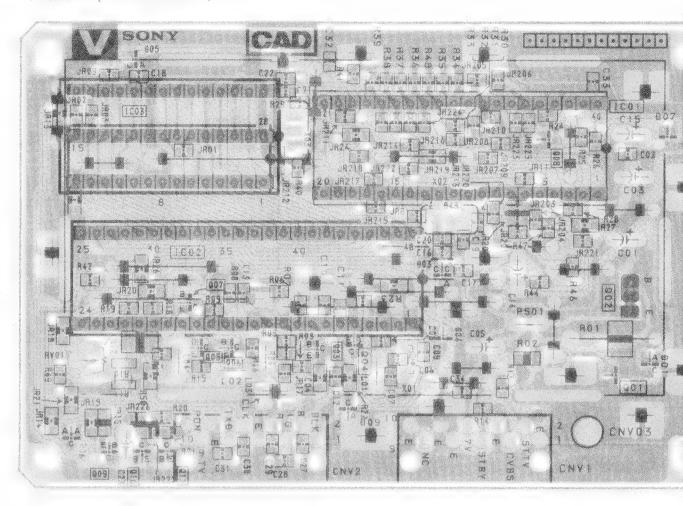
14



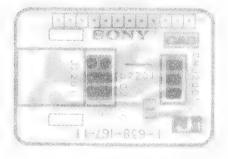




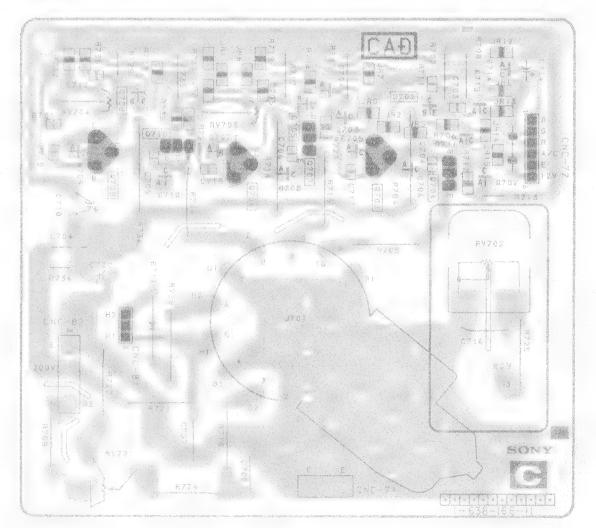
- V Board - (KV-M2151D ONLY)

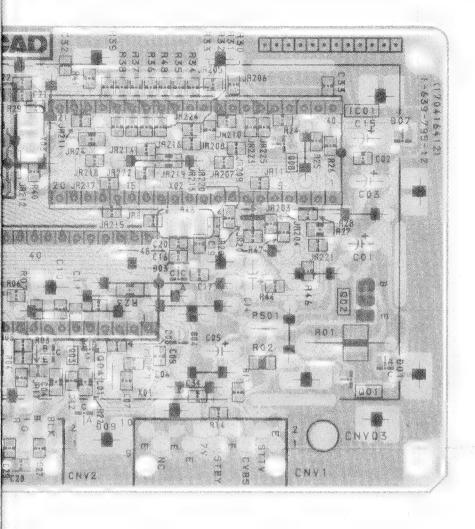


- J1 Board -



- C Board -





SONY



KEY-COOSV-F

L78LR05Đ-MA

M5F78M12L

PCA84C840P-011

T0A8304 RC4558P ST24C02AB1 C 7 6 5 1 2 3 4

SAA5246P/E

(TOP VIEW

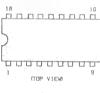
CTOP VIEW

STR54041



TĐA3505-V1 FCB61C65L-70P TĐA4650-V4

TĐA3827-V3 TĐA7245



T-0A4660V2 , hannanah, CLOS A1EA

TOP VIEW

#PC1488H 0

#PC574J

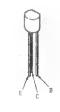


BC637-16





BF959-AMMO



BU508AS2



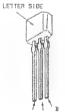
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25A1091-#



25C24105N

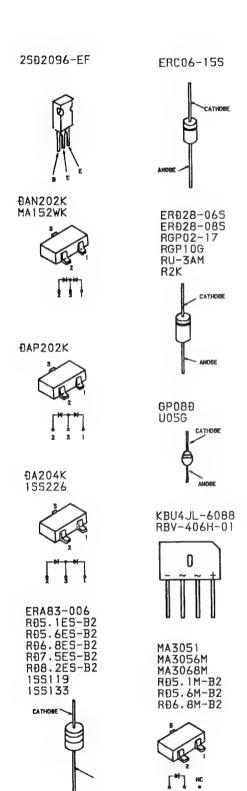


2SC2688-LK



2SD1408-Y



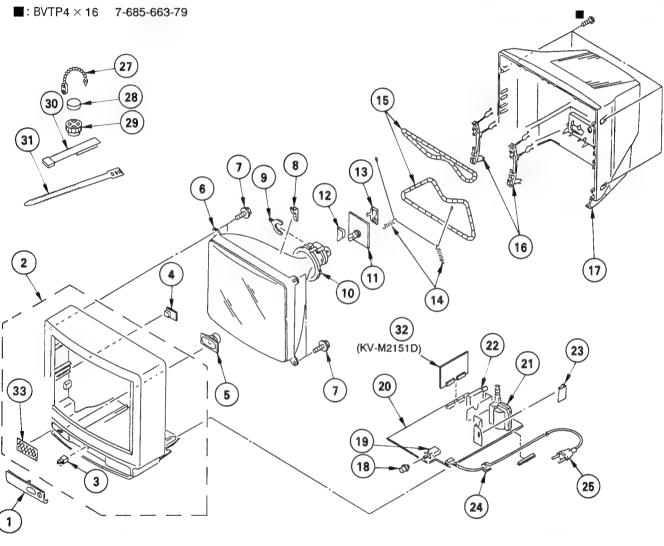


SPR-54MVW

SECTION 6 EXPLODED VIEW

- Items with no part number and no description are not stocked because they are seldom required for routine service.
 The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark A are critical for safety. Replace only with part number specified.



REF.N	O. PART NO.	DESCRIPTION	REMARK	REF.N	IO. PART NO.	DESCRIPTION RE	MARK
1 2 3 4 5	X-4030-305-1 X-4030-295-1 4-392-036-01	DOOR ASSY (KV-M2150D) DOOR ASSY (KV-M2151D) CABINET ASSY (WITH BEZEL ASSY) CATCHER, PUSH J1 BOARD SPEAKER	3, 33	19 20	*A-1632-089-A *A-1632-086-A	BUTTON, POWER SWITCH, PUSH (AC POWER) A BOARD, COMPLETE (KV-M2150D) A BOARD, COMPLETE (KV-M2151D) TRANSFORMER ASSY, FLYBACK (UX-1650)	
6 7 8 9 10	★ 8-738-758-05 4-036-189-01 3-704-495-01 1-452-277-00	PICTURE TUBE (A51JXH61X) SCREW (S), PT SPACER, DY MAGNET, BMC DEFLECTION YOKE (Y21PFA2)		23	↑ 1-693-093-11 *4-200-400-01 ↑ 4-389-201-03 ↑ 1-590-501-11	TUNER (BT-3C421) PLATE, INSULATION HOLDER, AC CORD CORD, POWER (WITH NOISE FILTER)	
11 12 13 14 15	*4-379-167-01 *4-379-160-01 4-200-433-01	C BOARD, COMPLETE COVER (MAIN), CV COVER (REAR LID), CV SPRING, EXTENSION COLL, DEMAGNETIZATION		27 28 29 30 31	1-452-032-00 1-452-094-00 X-4309-608-0 3-701-007-00	CLIP, LEAD WIRE MAGNET, DISK; 10MM Ø MAGNET, ROTATABLE DISK; 15MM Ø PERMALLOY ASSY, CONVERGENCE BAND, BINDING	
16 17	*4-386-622-01 4-200-673-01	BAND, DGC COVER, REAR		32	*A-1645-017-A X-4030-384-1	V BOARD, COMPLETE (KV-M2151D) GRILLE ASSY	

SECTION 7 ELECTRICAL PARTS LIST



NOTE:

specified.

The components identified by shading and mark A are critical for safety. Replace only with part number Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

• MF : μF, PF : μμF

• MMH : inH , UH : μH

RESISTORS

• All resistors are in ohms
• F : nonflammable

REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION		REMARK
*A-1632-089-A *A-1632-086-A	A BOARD, COMPLETE (KV-M215) **************** A BOARD, COMPLETE (KV-M215) ************************************	OD) 1D)	C128 C130 C131 C132	1-163-025-11 1-136-171-00 1-164-232-11 1-163-029-11 1-164-232-11	CERAMIC CHIP 0.001MF FILM 0.33MF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.0047MF CERAMIC CHIP 0.01MF	5% 10% 10%	50V 50V 50V 50V 50V
4 200 399 61 4 201 - 957 - 01 4 - 201 - 057 - 01 *4 - 341 - 752 - 01	A BOARD, COMPLETE (KV-M215 ************** A BOARD, COMPLETE (KV-M215 ************** SPACER, IC HOLDER, LED COVER, LED COVER, FUSE EYELET ACITOR> ELECT 100MF 2:		C134 C135 C136 C138 C139	1-136-562-11 1-163-033-00 1-163-033-00 1-216-295-00 1-164-232-11	MYLAR 0.0082MF CERAMIC CHIP 0.022MF	10% 10% 1/10 10%	400V 50V 50V
CAP	ACITOR>		: C140	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C001 1-126-101-11 C002 1-106-220-00 C003 1-163-031-11 C004 1-123-382-00 C005 1-126-103-11	CERAMIC CHIP O.OIMF ELECT 3.3MF 2	0% 16V 0% 100V 50V 0% 50V 0% 16V	C141 C142 C143 C144	1-163-017-00 1-163-017-00 1-163-809-11	CERAMIC CHIP 0.0047MF CERAMIC CHIP 0.0047MF CERAMIC CHIP 0.047MF CERAMIC CHIP 0.0047MF	10% 10% 10% 10%	50V 50V 25V 50V
C006 1-163-117-00 C007 1-124-907-11 C009 1-124-907-11 C010 1-163-117-00 C012 1-126-233-11	CERAMIC CHIP 100PF 5: ELECT 10MF 2: ELECT 10MF 2: CERAMIC CHIP 100PF 5:		C145 C146 C147 C148 C149	1-163-809-11 1-163-809-11 1-163-809-11 1-164-665-11 1-124-119-00		10% 10% 10% 10% 20%	25V 25V 25V 50V 16V
C018 1-163-031-11 C020 1-124-903-11 C021 1-124-907-11 C023 1-124-907-11 C024 1-124-907-11	CERAMIC CHIP 0.01MF ELECT 1MF 20 ELECT 10MF 20 ELECT 10MF 20	50V 0% 50V 0% 50V 0% 50V 0% 50V	C149 C151 C154 C157 C163	1-126-101-11 1-124-907-11 1-164-232-11 1-124-927-11 1-164-232-11	CERAMIC CHIP 0.01MF ELECT 4.7MF	20% 20% 10% 20% 10%	16V 50V 50V 50V 50V
C025 1-126-233-11 C026 1-124-903-11 C030 1-124-903-11 C037 1-163-034-00 C038 1-163-009-11	ELECT 22MF 2: ELECT 1MF 2: ELECT 1MF 2: CERAMIC CHIP 0.033MF	0% 50V 0% 50V 0% 50V 50V 50V 0% 50V	C201 C202 C203 C204 C206	1-126-233-11 1-124-925-11 1-163-009-11 1-124-480-11 1-163-011-11	ELECT 2.2MF CERAMIC CHIP 0.001MF ELECT 470MF	20% 20% 10% 20% 10%	50V 50V 50V 25V 50V
C039 1-163-117-00 C041 1-124-478-11 C055 1-163-075-00 C058 1-163-077-00 C059 1-163-031-11	CERAMIC CHIP 100PF 55 ELECT 100MF 20 CERAMIC CHIP 0.047MF		C207 C208 C209 C210 C302	1-124-925-11 1-126-104-11 1-124-910-11 1-106-228-00 1-163-059-00	ELECT 470MF ELECT 47MF MYLAR 0.22MF	20% 20% 20% 10%	50V 35V 50V 100V 50V
C062 1-126-101-11 C063 1-163-017-00 C101 1-124-477-11 C102 1-124-910-11 C103 1-163-105-00	ELECT 100MF 21 CERAMIC CHIP 0.0047MF 10 ELECT 47MF 21	0% 16V 0% 50V 0% 16V 0% 50V	C303 C304 C305 C306 C307	1-124-910-11 1-106-220-00	CERAMIC CHIP 0.1MF	20% 10%	50V 25V 50V 100V 25V
C104 1-164-665-11 C105 1-164-665-11	CERAMIC CHIP 0.039MF 10 CERAMIC CHIP 0.039MF 10 CERAMIC CHIP 0.01MF	0% 50V 0% 50V 50V 0% 16V	C308 C309 C311 C312 C313	1-163-099-00 1-163-133-00	ELECT 47MF CERAMIC CHIP 18PF CERAMIC CHIP 470PF CERAMIC CHIP 150PF CERAMIC CHIP 33PF	20% 5% 5% 5%	50V 50V 50V 50V
C114 1-163-123-00 C115 1-163-031-11 C120 1-163-173-00 C123 1-163-117-00 C125 1-124-917-11	CERAMIC CHIP 47PF 55 CERAMIC CHIP 0.01MF CERAMIC CHIP 47PF 55 CERAMIC CHIP 100PF 55	% 50V 50V % 50V	C314 C316 C317 C318 C319	1-163-103-00 1-163-377-11 1-163-093-00 1-164-232-11 1-163-038-00	CERAMIC CHIP 27PF CERAMIC CHIP 100PF CERAMIC CHIP 10PF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.1MF	5% 5% 5% 10%	50V 50V 50V 50V 55V

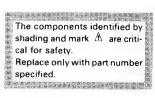


REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION	1		REMARK
C321 C323 C329 C330 C331	1-131-367-00 1-163-117-00 1-124-927-11	CERAMIC CHIP 100PF ELECT 4.7MF	10% 5% 20%	16V 50V 50V	C517 C520 C521 C524 C525	1-163-033-00 1-163-033-00 1-131-377-00 1-106-228-00 1-106-216-00 1-124-910-11			10% 10% 10%	50V 50V 10V 100V 100V
C332 C333 C334 C335 C336	1-163-037-11 1-163-063-00 1-163-063-00 1-163-119-00	MYLAR 0.33MF CERAMIC CHIP 0.022MF CERAMIC CHIP 0.022MF CERAMIC CHIP 0.022MF CERAMIC CHIP 120PF		100V 25V 50V 50V 50V	C527 C529 C530 C531	1-124-910-11 1-164-232-11 1-163-117-00 1-163-197-00 1-163-113-00 1-163-117-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF	10%	50V 50V 50V 50V 50V 50V
C338 C339 C340 C341				100V 100V 16V 100V	C536 C537 C540 C601 ♠	1-124-927-11 1-163-038-00 1-163-111-00 1-161-964-61	ELECT CERAMIC CHIP CERAMIC CHIP	4.7MF	20%	50V 25V 50V 250V
C344 C345 C346 C347	1-163-037-11	MYLAR 0.047MF MYLAR 0.33MF CERAMIC CHIP 180PF CERAMIC CHIP 0.022MF CERAMIC CHIP 0.022MF	10%	100V 100V 50V 50V 25V	1	1-161-964-61 1-162-599-12 1-125-318-00 1-161-754-00 1-136-637-11 1-106-367-00			20% 10% 10%	250V 250V 400V 2KV 630V
C348 C349 C352 C353 C354	1-163-037-11 1-106-375-12 1-163-037-11 1-163-037-11	CERAMIC CHIP 0.022MF CERAMIC CHIP 0.022MF MYLAR 0.022MF CERAMIC CHIP 0.022MF CERAMIC CHIP 0.022MF	10% 10% 10% 10% 10%	25V 25V 250V 25V 25V		1-106-367-00 1-161-753-00 1-124-347-00 1-124-557-11 1-102-228-00 1-126-101-11		470PF 100MF 1000MF 470PF	10% 20% 20% 10%	400V 3KV 160V 25V 500V
C355 C356 C357 C358 C359	1-163-237-11 1-163-031-11 1-124-556-11 1-163-125-00	CERAMIC CHIP 27PF CERAMIC CHIP 0.01MF ELECT 2200MF CERAMIC CHIP 220PF	20% 5%	25V 50V 50V 16V 50V	C618 C621 A C623 A C625 A	1-126-233-11 1-136-879-11 1-164-246-61 1-136-879-11	ELECT FILM CERAMIC FILM	100MF 22MF 0.68MF 0.0022MF 0.68MF	20% 20% 20% 20% 20% 5%	50V 300V 400V 300V
C370 C388	1-126-233-11 1-106-220-00		20% 10%	50V 50V 50V 50V 100V	C632 ▲ C633 ▲	1-163-125-00 .1-161-964-61 .1-164-246-61 1-101-821-00 1-102-244-00	CERAMIC CERAMIC	0.0047MF 0.0022MF	20%	50V 250V 400V 500V 500V
C401 C403 C404 C430 C431	1-164-336-11	ELECT 47MF CERAMIC CHIP 470PF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.33MF ELECT 47MF	20%	50V 50V 50V 25V 50V	C804 C805 ▲ C806 C807 ▲ C808	1-101-821-00 1-102-244-00 1-126-101-11 1-136-080-11 1-136-187-11 1-161-731-51 1-136-933-11	ELECT FILM FILM CERAMIC FILM	100MF 0.011MF 0.047MF 0.001MF 1MF	20% 3% 10% 1 0% 5%	16 V 2K V 250 V 2K V 100 V
C432 C433 C434 C451 C475	1-163-031-11 1-126-233-11 1-163-031-11 1-163-197-00 1-126-233-11	CERAMIC CHIP 0.01MF ELECT 22MF CERAMIC CHIP 0.01MF CERAMIC CHIP 470PF ELECT 22MF	20% 10% 20%	50V 25V 50V 50V 50V		1-102-212-00 1-136-540-11 1-124-634-11 1-163-009-11 1-126-542-11		820PF 0.82MF 1MF		500V 160V 250V 50V 160V
C476 C490 C499 C501 C502	1-106-216-00 1-124-910-11 1-163-205-00 1-163-181-00 1-163-005-11	MYLAR 0.068MF ELECT 47MF CERAMIC CHIP 0.001MF CERAMIC CHIP 100PF CERAMIC CHIP 470PF	10% 20% 10% 5% 10%	100V 50V 50V 50V 50V	C815 C816 C817 C818 C818	1-126-233-11 1-102-228-00 1-123-948-00 (1-106-375-12 1-162-114-00	ELECT CERAMIC ELECT MYLAR CERAMIC	22MF 470PF 22MF 0.022MF 0.0047MF	20% 10% 20% 10%	50V 500V 250V 250V 2KV
C503 C504 C505 C506 C507	1-163-181-00 1-124-122-11 1-126-233-11 1-106-228-00 1-124-557-11	CERAMIC CHIP 100PF ELECT 100MF ELECT 22MF MYLAR 0.22MF ELECT 1000MF	5% 20% 20% 10% 20%	50V 50V 50V 100V 25V	C820 C821 C822 C823 C824	1-162-318-11 1-126-101-11 1-162-318-11 1-126-233-11 1-124-913-11	CERAMIC ELECT CERAMIC ELECT ELECT	0.001MF 100MF 0.001MF 22MF 470MF	10% 20% 10% 20% 20%	500V 16V 500V 50V 50V
C508 C509 C510 C511 C512	1-163-117-00 1-162-568-11 1-163-081-00 1-163-117-00 1-106-216-00	CERAMIC CHIP 100PF CERAMIC CHIP 0.33MF CERAMIC CHIP 0.22MF CERAMIC CHIP 100PF MYLAR 0.068MF	5% 10% 5% 10%	50V 16V 25V 50V 100V	C825 C840 C850 C1301	1-136-204-11 1-124-902-00 1-126-101-11 1-164-232-11 1-126-101-11	MYLAR ELECT ELECT CERAMIC CHIP ELECT	0.015MF 0.47MF 100MF	10% 20% 20% 10% 20%	400V 50V 16V 50V 16V
C513 C514 C515 C516	1-124-927-11 1-136-298-00 1-163-035-00 1-163-113-00	ELECT 4.7MF FILM 0.0033MF CERAMIC CHIP 0.047MF CERAMIC CHIP 68PF	20% 5% 5%	50V 100V 50V 50V	C1303	1-163-809-11 1-163-809-11	CERAMIC CHIP CERAMIC CHIP	0.047MF	10% 10%	25V 25V



REMARK

REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION
C1305 1-126-233-11	ELECT 22MF 20%	50V	DETO	8-719-400-18 8-719-400-18 8-719-946-90 8-719-976-64 8-719-911-55	DIODE MA152WK DIODE MA152WK DIODE KBU4JL-6088 DIODE RGP02-17 DIODE U05G
CD101 1-579-110-11 CF501 1-404-801-11 SWF101 1-579-120-11 XF501 1-527-840-00	TER- DISCRIMINATOR, CERAMIC TRAP, CERAMIC FILTER, SURFACE WAVE FILTER, CERAMIC		D604 D605 D606 D607 D608	8-719-928-08 8-719-300-33 8-719-980-78 8-719-300-33 8-719-300-33	DIODE ERD28-08S DIODE RU-3AM DIODE ERA83-006 DIODE RU-3AM DIODE RU-3AM
SCON	NECTOR>		D609	8-719-911-55	DIODE UOSG DIODE UOSG
CNA42 *1-565-394-11	PIN, BOARD TO BOARD CONNECTOR(K	V-M2151D)	D611 D801 D802	8-719-911-55 8-719-312-40 8-719-945-80 8-719-928-08	DIODE R2K DIODE ERCO6-15S DIODE ERD28-08S
CNA61 *1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		D803 D805	8-719-300-33 8-719-300-33	DIODE RU-3AM DIODE RU-3AM
CNA64 *1-508-784-00 CNA81 *1-508-768-00	PIN, CONNECTOR (POWER) PIN, CONNECTOR (5MM PITCH) 2P PIN, CONNECTOR (5MM PITCH) 1P PIN, CONNECTOR (5MM PITCH) 6P		D807 D808	8-719-300-33 8-719-300-33	DIODE RU-3AM DIODE RU-3AM
CNA82 *1-580-798-11	CONNECTOR PIN (DY) 6P		D809 D820	8-719-400-18 8-719-911-19	DIODE MAI52WK DIODE 1SS119 DIODE 1SS110
< T R 1	MMER>		D1302 D1303	8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119
CT332 1-141-418-11 < DIG	CAP, ADJ DDE>		D1304 D1305 D1306	8-719-400-18 8-719-400-18 8-719-800-76	DIODE RU-3AM DIODE RU-3AM DIODE RU-3AM DIODE RU-3AM DIODE RU-3AM DIODE RU-3AM DIODE ISSAIP DIODE ISSIIP DIODE ISSIIP DIODE ISSIIP DIODE ISSIP DIODE ISSIP DIODE ISSIP DIODE MA152WK DIODE MA152WK DIODE MA252WK DIODE MA252WK DIODE ISS226 DIODE ISS226 AY LINE> MODULE, Y DELAY LINE DELAY LINE, Y E> FUSE (H.B.C.) 4A/250V HOLDER, FUSE; F601 IC PCA84C84OP/016 IC ST24C02ABI IC KEY-COOSV-F IL 1781RO5D-MA
	DIODE SPR-54MVW		D1307	8-719-800-76	DIODE 1SS226
D004 8-719-914-44 D007 8-719-400-18 D008 8-719-105-82	DIODE DAP2O2K DIODE MA152WK DIODE RD5.1M-B2		 	<del< td=""><td>AY LINE></td></del<>	AY LINE>
D009 8-719-105-82	DIODE RD5.1M-B2		DL301 DL1301	1-236-062-11 1-415-613-11	MODULE, Y DELAY LINE DELAY LINE, Y
D011 8-719-911-19 D020 8-719-911-19	DIODE 1SS119 DIODE 1SS119		I 	<pre><pre><pre><pre><pre></pre></pre></pre></pre></pre>	rs
D101 8-719-110-03 D102 8-719-110-03	DIODE RD7.5ES-B2 DIODE RD7.5ES-B2 DIODE RD7.5ES-B2		E401 ♠	<001>	E/ FIISE /U B C \ 44/250V
D103 8-719-110-03 D104 8-719-400-18	DIODE MA152WK		. FOUL A	1-533-230-11	HOLDER, FUSE: F601
D110 8-719-109-85 D301 8-719-914-44 D302 8-719-800-76	D10DE RD5.1ES-B2 D10DE DAP202K D10DE 1SS226		*	<[C>	
D303 8-719-914-44	DIODE DAPZOZK		1 COO1	8-759-062-07 8-759-043-86	IC PCA84C840P/016 IC ST24C02AB1
D305 8-719-800-76 D306 8-719-400-18 D313 8-719-800-76	DIODE 1SS226 DIODE MA152WK DIODE 1SS226		10003 10004 10005	8-749-922-13 8-759-805-37 8-759-157-40	IC KEY-COOSV-F IC L78LRO5D-MA IC UPC574J
D313 8-719-800-76 D321 8-719-109-89 D324 8-719-914-44	DIODE RD5.6ES-B2 DIODE DAP202K		10102	8-759-044-41	IC TDA3827/V3
D333 8-719-911-19	D10DE 1SS119		1 C201 1 C301	8-759-502-74 8-759-505-39	IC TDA7245 IC TDA4660V2
D334 8-719-914-44 D402 8-719-109-97	DIODE DAP202K DIODE RD6.8ES-B2 DIODE RD6.8ES-B2		1C302 1C331	8-759-512-04 8-759-521-22	IC TDA3505-V1 IC TDA4650/V4
D403 8-719-109-97 D404 8-719-109-97	DIODE RD6.8ES-B2		10501	8-759-113-13 *4-389-343-01	IC UPC1498H SPRING: IC501
D405 8-719-110-09 D406 8-719-110-09	DIODE RD8.2ES-B3 DIODE RD8.2ES-B3		1 C502 1 C601	8-759-515-72 8-749-901-65	IC TDA8304 IC STR54041
D411 8-719-109-97 D417 8-719-914-44 D418 8-719-914-44	DIODE RD6.8ES-B2 DIODE DAP2O2K DIODE DAP2O2K		I C801	*4-368-683-01 8-759-945-58	SPRING; IC601 IC RC4558P
	DIONE DAI 202K		: 1C802	8-759-604-39 *4-389-343-01	IC M5F78M12L SPRING; IC802
D426 8-719-911-19	DIODE 1SS119		I	** JUJ JYJ UI	
D427 8-719-911-19 D450 8-719-109-97	DIODE 1SS119 DIODE RD6.8ES-B2		1 : : : :		
D427 8-719-911-19	DIODE 1SS119		J401	<jac 1-561-534-00</jac 	K>





REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO.	DESCRIPTION	REMARK
J1401 1-563-500-11	JACK BLOCK, PIN (L TYPE) 2P		Q305 8-729-230-49	TRANSISTOR 2SC2712-Y	G
< c 01	L>		Q307	TRANSISTOR 2SA1162-G TRANSISTOR 2SC2712-Y	G
L001 1-408-409-00 L102 1-408-409-00	INDUCTOR 10UH INDUCTOR 10UH		Q401 8-729-216-22 Q401 8-729-230-49 Q457 8-729-216-22	TRANSISTUR 2SA1162-G TRANSISTOR 2SC2712-Y TRANSISTOR 2SA1162-G	G
L103	INDUCTOR 1.5UH INDUCTOR 10UH		Q504 8-729-230-49	TRANSISTOR 2SC2712-Y	G
L107 1-408-410-00	INDUCTOR 12UH		Q601 8-729-906-74 Q801 8-729-119-80	TRANSISTOR 25A1162-G TRANSISTOR BC637-16 TRANSISTOR 2SC2688-L	K
L301 1-408-409-00 L302 1-408-419-00 L303 1-408-425-00	INDUCTOR 10UH INDUCTOR 68UH INDUCTOR 220UH		8-729-925-64 *4-389-343-01	TRANSISTOR BU508AS2 SPRING; Q802	
L331 1-404-554-11	COIL		Q803 8-729-202-03 *4-389-343-01	TRANSISTOR 2SD1408-Y SPRING; Q803	
L404 1-408-397-00 L406 1-408-417-00 L407 1-410-872-21	INDUCTOR 1UH INDUCTOR 47UH INDUCTOR 10UH		Q1301 8-729-216-22 Q1302 8-729-901-06	TRANSISTOR 2SA1162-G TRANSISTOR DTA144EK	
L501 1-404-493-31 L502 1-408-408-00	COIL INDUCTOR 8.2UH		01303 8-729-901-01 01304 8-729-230-49	TRANSISTOR DTC144EK TRANSISTOR 2SC2712-YO	ĵ
L506 1-408-411-00 L801 1-407-365-00	INDUCTOR 15UH		Q1305 8-729-901-01 Q1306 8-729-901-01	TRANSISTOR DTC144EK TRANSISTOR DTC144EK	
L801 1-407-365-00 L802 1-420-872-00 L804 1-459-390-00 L805 1-459-105-21	JACK BLOCK, PIN (L TYPE) 2P INDECTOR 10UH INDUCTOR 10UH INDUCTOR 1.5UH INDUCTOR 35UH INDUCTOR 12UH INDUCTOR 10UH INDUCTOR 22UH COIL INDUCTOR 1UH INDUCTOR 1UH INDUCTOR 1UH INDUCTOR 47UH INDUCTOR 10UH COIL INDUCTOR 15UH COIL INDUCTOR 15UH COIL, CHOKE COIL, AIR CORE COIL (WITH CORE) COIL (WITH CORE) HLC INDUCTOR 4.7MMH INDUCTOR 4.7MMH INDUCTOR 82UH INDUCTOR 1UH		<re< td=""><td>SISTOR></td><td></td></re<>	SISTOR>	
L806 1-459-652-12	HLC LUDUCTOR		JR003 1-216-295-00 JR004 1-216-295-00	METAL GLAZE O METAL GLAZE O	5% 1/10W 5% 1/10W
L807 1-408-239-00 L808 11-408-226-00 L1001 1-408-397-00	INDUCTOR 4.7MMH INDUCTOR 82UH INDUCTOR 1PH		JR005 1-216-295-00 JR006 1-216-295-00 JR009 1-216-295-00	METAL GLAZE O S METAL GLAZE O S METAL GLAZE O	5% 1/10W 5% 1/10W 5% 1/10W
L1002 1-408-397-00	INDUCTOR 10H		JR010 1-216-295-00	METAL GLAZE 0	5% 1/10W
<var< td=""><td>TABLE COIL></td><td></td><td>JR011 1-216-295-00 JR012 1-216-295-00 JR015 1-216-295-00</td><td>METAL GLAZE 0 5 METAL GLAZE 0 5</td><td>5% 1/10W 5% 1/10W 5% 1/10W</td></var<>	TABLE COIL>		JR011 1-216-295-00 JR012 1-216-295-00 JR015 1-216-295-00	METAL GLAZE 0 5 METAL GLAZE 0 5	5% 1/10W 5% 1/10W 5% 1/10W
LV301 1-404-554-11	COIL		JR016 1-216-295-00	METAL GLAZE 0	1/10W
<10	LINK>		JR017 1-216-295-00 JR018 1-216-295-00 JR019 1-216-295-00	METAL GLAZE 0 5 METAL GLAZE 0 5 METAL GLAZE 0 5	% 1/10W % 1/10W % 1/10W % 1/10W % 1/10W
PS801A 1-532-637-91			JR020 1-216-295-00 JR026 1-216-295-00	METAL GLAZE O 5	% 1/10W 1/10W
<tra< td=""><td>NSISTOR> TRANSISTOR 2SC2712-YG TRANSISTOR DTC144EK TRANSISTOR 2SC2712-YG TRANSISTOR DTA143TK</td><td></td><td>JR027 1-216-295-00 JR028 1-216-295-00</td><td>METAL GLAZE 0 5</td><td>% 1/10W % 1/10W</td></tra<>	NSISTOR> TRANSISTOR 2SC2712-YG TRANSISTOR DTC144EK TRANSISTOR 2SC2712-YG TRANSISTOR DTA143TK		JR027 1-216-295-00 JR028 1-216-295-00	METAL GLAZE 0 5	% 1/10W % 1/10W
Q001 - 8-729-230-49 Q003 8-729-901-01 Q004 - 8-729-230-49	TRANSISTOR 2SC2712-YG TRANSISTOR DTC144EK TRANSISTOR 2SC2712-YG		JR029 1-216-295-00 JR030 1-216-295-00	METAL GLAZE 0 5 METAL GLAZE 0 5 METAL GLAZE 0 5	% 1/10W % 1/10W % 1/10W % 1/10W % 1/10W
0004	TRANSISTOR DTA143TK TRANSISTOR 2SC2410SN		+ JR036 1-216-295-00	METAL GLAZE 0 5	% 1/10W
Q007 8-729-230-49 Q015 8-729-230-49	TRANSISTOR 2SC2712-YG TRANSISTOR 2SC2712-YG		JR037 1-216-295-00 JR038 1-216-295-00 JR039 1-216-295-00	METAL GLAZE 0 5 METAL GLAZE 0 5 METAL GLAZE 0 5	% 1/10W % 1/10W % 1/10W
Q016 8-729-901-47 Q017 8-729-216-22	TRANSISTOR DTA143EK TRANSISTOR 2SA1162-G		JR045 1-216-295-00	METAL GLAZE 0 5	% 1/10W
Q019 8-729-901-06 Q020 8-729-901-00	TRANSISTOR DTA144EK TRANSISTOR DTC124EK		JR060 1-216-295-00 JR099 1-216-295-00 JR101 1-216-296-00	METAL GLAZE 0 5	% 1/10₩ % 1/10₩ % 1/8₩
Q101 8-729-901-47 Q102 8-729-901-47 Q103 8-729-901-47	TRANSISTOR DTA143EK TRANSISTOR DTA143EK TRANSISTOR DTA143EK		JR102 1-216-296-00 JR103 1-216-296-00	METAL GLAZE 0 5 METAL GLAZE 0 5	% 1/8W % 1/8W
Q104 8-729-230-49	TRANSISTOR 2SC2712-YG		JR104 1-216-296-00 JR105 1-216-296-00	METAL GLAZE 0 5 METAL GLAZE 0 5	% 1/8W % 1/8W
Q106 8-729-230-49 Q107 8-729-216-22 Q112 8-729-230-49	TRANSISTOR 2SC2712-YG TRANSISTOR 2SA1162-G TRANSISTOR 2SC2712-YG		JR106 1-216-296-00 JR107 1-216-296-00 JR108 1-216-296-00	METAL GLAZE 0 5	% 1/8W % 1/8W % 1/8W
Q114 8-729-901-00 Q115 8-729-901-00	TRANSISTOR DTC124EK TRANSISTOR DTC124EK		JR109 1-216-296-00	METAL GLAZE 0 5	% 1/8W
Q141 8-729-014-99 Q302 8-729-230-49	TRANSISTOR BF959-AMMO TRANSISTOR 2SC2712-YG		JR110 1-216-296-00 JR111 1-216-296-00 JR117 1-216-296-00	METAL GLAZE 0 5 METAL GLAZE 0 5 METAL GLAZE 0 5	% 1/8W
Q303 8-729-230-49 Q304 8-729-230-49	TRANSISTOR 2SC2712-YG		JR118 1-216-296-00	METAL GLAZE 0 5 METAL GLAZE 0 5	% 1/8W



REF.NO. PART NÚ.	DESCRIPTION		REMARK ;	REF.NO.	PART NO.	DESCRIPTION			REMARK
JR119 1-216-296-00 JR123 1-216-296-00 JR125 1-216-296-00 JR126 1-216-296-00 JR127 1-216-296-00	METAL GLAZE 0 METAL GLAZE 0 METAL GLAZE 0 METAL GLAZE 0	5% 1/8W		R042 R043	1-216-081-00 1-216-081-00 1-216-081-00 1-215-900-11 1-216-105-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL OXIDE METAL GLAZE	22K 5% 22K 5% 22K 5% 22K 5% 22OK 5% 47K 5%	1/10W 1/10W 1/10W 2W 1/10W	
JR128 1-216-296-00 JR129 1-216-296-00 JR130 1-216-296-00 JR131 1-216-296-00 JR133 1-216-296-00		5% 1/8W 5% 1/8W 5% 1/8W 5% 1/8W 5% 1/8W		R046 R047 R048 R049	1-216-089-00 1-216-081-00 1-216-079-00 1-216-202-00 1-216-073-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	22K 5% 18K 5% 1.5K 5% 10K 5%	1/10W 1/10W 1/10W 1/8W 1/10W	
JR134 1-216-296-00 JR135 1-216-296-00 JR136 1-216-296-00 JR137 1-216-296-00 JR139 1-216-296-00 JR144 1-216-296-00	METAL GLAZE O METAL GLAZE O METAL GLAZE O	5% 1/8W 5% 1/8W 5% 1/8W 5% 1/8W 5% 1/8W		R051 R052 R053 R054	1-216-250-00 1-216-295-00 1-216-065-00 1-216-049-00 1-249-395-11 1-216-057-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE CARBON METAL GLAZE	150K 5% 0 5% 4.7K 5% 1K 5% 15 5% 2.2K 5%	1/8W 1/10W 1/10W 1/10W 1/4W 1/10W	
JR144 1-216-296-00 JR147 1-216-296-00 JR148 1-216-296-00 JR149 1-216-296-00 JR150 1-216-296-00	METAL GLAZE U	5% 1/8W 5% 1/8W 5% 1/8W 5% 1/8W		R056 R058 R059 R060	1-216-041-00 1-249-434-11 1-216-089-00 1-216-234-00 1-216-079-00	METAL GLAZE CARBON METAL GLAZE METAL GLAZE METAL GLAZE	470 5% 27K 5% 47K 5% 33K 5% 18K 5%	1/10W 1/4W 1/10W 1/8W 1/10W	
JR151 1-216-296-00 JR152 1-216-296-00 JR153 1-216-296-00 JR155 1-216-296-00 JR181 1-216-296-00		5% 1/8W 5% 1/8W 5% 1/8W 5% 1/8W		R062 R064 R072	1-216-242-00 1-216-095-00 1-216-049-00 1-216-248-00 1-216-198-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	68K 5% 82K 5% 1K 5% 120K 5%	1/8W 1/10W 1/10W 1/8W 1/8W	
JR182 1-216-296-00 JR183 1-216-296-00 JR184 1-216-296-00 R001 1-216-069-00 R002 1-216-081-00	METAL GLAZE 6.8	5% 1/8W 5% 1/8W 5% 1/8W 5% 1/10V		R077 R078 R079 R081	1-216-077-00 1-216-049-00 1-216-049-00 1-216-198-00 1-216-049-00	METAL GLAZE METAL GLAZE METAL GLAZE	15K 5% 1K 5% 1K 5% 1K 5% 1K 5%	1/10W 1/10W 1/10W 1/8W 1/10W	
R003 1-216-081-00 R004 1-216-083-00 R005 1-216-206-00 R006 1-216-254-00 R007 1-216-190-00	METAL GLAZE 221 METAL GLAZE 271 METAL GLAZE 2 METAL GLAZE 220 METAL GLAZE 470	K 5% 1/10V 2K 5% 1/8₩ DK 5% 1/8₩		R083 R084 R087 R094	1-216-065-00 1-216-057-00 1-216-027-00 1-216-077-00 1-216-065-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	4.7K 5% 2.2K 5% 120 5% 15K 5% 4.7K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	
R008 1-216-049-00 R009 1-216-049-00 R010 1-216-198-00 R011 1-216-035-00 R012 1-216-248-00	METAL GLAZE 1K METAL GLAZE 1K METAL GLAZE 1K METAL GLAZE 270	5% 1/10V 5% 1/8W 5% 1/10V		R096 R097 R099 R100	1-216-065-00 1-216-085-00 1-216-228-00 1-216-017-00 1-216-069-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	4.7K 5% 33K 5% 18K 5% 47 5% 6.8K 5%	1/10W 1/10W 1/8W 1/10W 1/10W	
R013 1-216-077-00 R014 1-216-689-11 R015 1-216-230-00 R016 1-216-049-00 R017 1-216-081-00	METAL GLAZE 391 METAL GLAZE 221 METAL GLAZE 1K METAL GLAZE 221	K 5% 1/8₩ 5% 1/10₩ K 5% 1/10₩) 	R102 R103 R104 R105	1-216-061-00 1-216-057-00 1-216-057-00 1-216-109-00 (1-216-081-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	3.3K 5% 2.2K 5% 2.2K 5% 330K 5% 22K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	
R018 1-216-065-00 R019 1-216-065-00 R020 1-216-065-00 R021 1-216-049-00 R022 1-216-198-00	METAL GLAZE	7K 5% 1/10V 7K 5% 1/10V 7K 5% 1/10V 5% 1/10V		R107 R108 R109 R110	1-216-073-00 1-216-049-00 1-216-190-00 1-249-437-11 1-216-085-00	METAL GLAZE METAL GLAZE METAL GLAZE CARBON METAL GLAZE	10K 5% 1K 5% 470 5% 47K 5% 33K 5%	1/10W 1/10W 1/8W 1/4W 1/10W	
R023 1-216-051-00 R024 1-216-065-00 R025 1-216-097-00 R026 1-216-089-00 R028 (1-216-085-00	METAL GLAZE 338	7K 5% 1/10V OK 5% 1/10V K 5% 1/10V K 5% 1/10V		R112 R113 R114 R115	1-249-411-11 1-216-085-00 1-216-238-00 1-216-045-00 '1-216-049-00	CARBON METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	330 5% 33K 5% 47K 5% 680 5% 1K 5%	1/4W 1/10W 1/8W 1/10W 1/10W	
R029 1-216-041-00 R030 1-216-077-00 R031 1-216-073-00 R032 1-216-057-00 R033 1-216-057-00	METAL GLAZE 470 METAL GLAZE 156 METAL GLAZE 100 METAL GLAZE 2.3) 5% 1/10V (5% 1/10W (5% 1/10W 2K 5% 1/10W 2K 5% 1/10W		R119 R130 R131	1-216-035-00 1-216-045-00 1-249-409-11 1-216-041-00 1-216-295-00	METAL GLAZE METAL GLAZE CARBON METAL GLAZE METAL GLAZE	270 5% 680 5% 220 5% 470 5% 0 5%	1/10W 1/10W 1/4W 1/10W 1/10W	
R034 1-216-238-00 R035 1-216-077-00 R038 1-216-073-00	METAL GLAZE 47N METAL GLAZE 15N METAL GLAZE 10N	(5% 1/10⊌		R136 R138	1-216-041-00 1-216-057-00	METAL GLAZE METAL GLAZE	470 5% 2.2K 5%	1/10W 1/10W	



REF.NO.	PART NO.	DESCRIPTION				REMARK	REF.NO.	PART NO.	DESCRIPTION			REMARK
R139 R140 R141 R142 R143	1-216-029-00 1-216-063-00 1-216-033-00	METAL GLAZE METAL GLAZE METAL GLAZE	0 680 150 3.9K 220	5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W		R352 R353 R354 R355	1-216-049-00	METAL GLAZE CARBON METAL GLAZE METAL GLAZE	560 390 56K 22K 1K	5% 5% 5%	1/10W 1/10W 1/4W 1/10W 1/10W
R144 R146 R147 R148 R149	1-216-065-00 1-216-033-00 1-216-073-00 1-216-017-00 1-216-182-00	METAL GLAZE METAL GLAZE METAL GLAZE	4.7K 220 10K 47	5% 5%	1/10W 1/10W (KV 1/10W 1/10W	-M2150D)	R357 R360	1-216-041-00 1-216-039-00 1-216-001-00 1-216-222-00 1-216-222-00 1-216-037-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	390 10 10K 10K 330	5% 5%%%%% 55%%%%%%%%%%%%%%%%%%%%%%%%%%	1/10W 1/10W 1/10W 1/8W 1/8W 1/10W
R151 R152 R153 R199	1-216-057-00 1-216-061-00 1-215-867-00 1-216-057-00 1-216-295-00	METAL GLAZE METAL GLAZE METAL OXIDE METAL GLAZE METAL GLAZE	220 2.2K 3.3K 470 2.2K	5% 5% 5%	1/10W 1/10W 1W 1/10W		R402 R403 R404 R405	1-216-172-00 1-216-023-00 1-216-023-00 1-216-023-00	METAL GLAZE METAL GLAZE METAL GLAZE	82 82 82 82 15K	555555555555555555555555555555555555555	1/8W 1/10W 1/10W 1/10W 1/8W
R201 R202 R203 R204 R205 R206	1-216-073-00 1-216-057-00 1-216-298-00 1-247-741-11 1-216-083-00 1-216-035-00	METAL GLAZE CARBON	10K 2.2K 2.2 150 27K 270	5% 5% 5%	1/10W 1/10W 1/10W 1/2W 1/10W		K412	1-216-226-00 11-216-091-00 1-216-023-00 1-216-037-00 1-216-037-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	15K 56K 82 330 330	5% 5% 5% 5%	1/8W 1/10W 1/10W 1/10W 1/10W
R207 R303 R304 R305	1-216-298-00 1-216-033-00 1-216-033-00 1-216-033-00 1-216-059-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	2.2 220 220 220 2.7K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W		R421	1-216-182-00 1-216-449-11 1-216-095-00	METAL GLAZE METAL GLAZE METAL OXIDE METAL GLAZE	330 470 220 56 82K	5% 5% 5% 5%	1/10W 1/10W 1/8W 2W (KV-M2151D) 1/10W
R307 R308 R309 R310 R311 R312	1-216-077-00 1-216-033-00 1-216-055-00 1-216-055-00 1-216-051-00 1-216-174-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	15K 220 1.8K 1K 1.2K 100	5%	1/10W 1/10W 1/10W 1/10W 1/10W 1/8W			1-216-222-00 1-216-033-00 1-216-045-00 1-216-049-00 1-216-073-00 1-216-077-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	10K 220 680 1K 10K	55555 55555	1/8W 1/10W 1/10W 1/10W 1/10W
R313 R314 R315 R316 R317	1-216-174-00 1-216-025-00 1-216-047-00 1-216-089-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 100 820 47K 1.5K	5% 5% 5% 5%	1/8W 1/10W 1/10W 1/10W 1/10W 1/8W		R431 R432 R433 R434	1-216-077-00 1-249-403-11 1-216-079-00 1-216-029-00 1-216-033-00	METAL GLAZE CARBON METAL GLAZE METAL GLAZE METAL GLAZE	15K 68 18K 150 220 47K	5%%%%% 5%%%% 5%	1/10W 1/4W 1/10W 1/10W 1/10W
R320 R321 R322 R323 R324	1-216-057-00 1-216-023-00 1-216-053-00 1-216-192-00 1-216-065-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	2.2K 82 1.5K 560 4.7K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/8W 1/10W		R436 R437 R501 R502	1-216-089-00 1-216-085-00 1-216-214-00 1-247-743-11	METAL GLAZE METAL GLAZE METAL GLAZE CARBON CARBON	33K 4.7K 220	555555555555555555555555555555555555555	1/10W 1/10W 1/8W 1/2W
R325 R326 R327 R328 R329 R330	1-249-410-11 1-216-035-00 1-216-121-00 1-216-001-00 1-216-109-00 1-216-244-00	CARBON METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	270 270 1M 10 330K 82K	5% 5% 5% 5%%	1/4W 1/10W 1/10W 1/10W 1/10W 1/8W		R504 R505 R507 R508 R510 R511	1-216-017-00 1-216-073-00 1-216-350-11 1-215-867-00 1-216-061-00 1-216-244-00	METAL GLAZE METAL GLAZE METAL OXIDE METAL GLAZE METAL GLAZE METAL GLAZE	10K 1.2 470 3.3K 82K	5% 5% 5%	1/10W 1/10W 1W F 1W F 1/10W 1/8W
R331 R332 R333 R334 R335	1-216-113-00 1-216-270-00 1-216-091-00 1-216-067-00 1-216-001-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	470K 1M 56K 5.6K 10	5% 5% 5% 5% 5%	1/10W 1/8W 1/10W 1/10W 1/10W		R512 R513 R514 R515 R516	1-216-089-00 1-216-053-00 1-216-051-00 1-216-683-11 1-216-095-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL CHIP METAL GLAZE	47K 1.5K 1.2K 22K 82K	5%	1/10W 1/10W 1/10W 1/10W 1/10W
R336 R337 R338 R341 R342 R346	1-216-059-00 1-216-073-00 1-216-073-00 1-216-061-00 1-216-041-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	2.7K 10K 10K 3.3K 470	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W 1/10W		R517 R518 R519 R520 R521	1-216-031-00 1-216-033-00 1-216-049-00 1-216-053-00 1-215-863-11	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL OXIDE	180 220 1K 330K 1.5K 100	5% 5% 5% 5%%	1/10W 1/10W 1/10W 1/8W 1/10W
R347 R348 R349 R350	1-216-037-00 1-216-089-00 1-216-033-00 1-216-029-00 1-216-041-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	330 47K 220 150 470	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W		R522 R523 R524 R525 R527	1-215-865-11 1-247-754-11 1-216-099-00 1-216-065-00 1-215-869-11	CARBON METAL GLAZE METAL GLAZE METAL OXIDE	1.5K 1.20K 120K 4.7K 1K	5% 5% 5%	1/2W 1/10W 1/10W 1/10W





REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO. DESCRIPTION REMARK
R532 1-216-081-00 R533 1-216-133-00 R534 1-216-069-00 R535 1-216-107-00 R539 1-216-049-00	METAL GLAZE 3.3M METAL GLAZE 6.8K METAL GLAZE 270K METAL GLAZE 1K	5% 1/10W 5% 1/10W 5% 1/10W	R1308 1-216-045-00 METAL GLAZE 680 5% 1/10W R1309 1-216-049-00 METAL GLAZE 1K 5% 1/10W R1310 1-216-047-00 METAL GLAZE 820 5% 1/10W R1311 1-216-065-00 METAL GLAZE 4.7K 5% 1/10W R1312 1-216-222-00 METAL GLAZE 10K 5% 1/8W
R542 1-216-025-00 R543 1-249-408-11 R545 1-216-286-00 R548 1-216-049-00 R601 & 1-205-909-11	CARBON 180 METAL GLAZE 4.7M METAL GLAZE 1K WIREWOUND 3.3	5% 1/10W 5% 10W F	R1313 1-216-025-00 METAL GLAZE 100 5% 1/10W <variable resistor=""> RV001 1-238-012-11 RES, ADJ, CARBON 1K</variable>
R602	METAL OXIDE 68K CARBON 1K	5% 2W 5% 1/2W 5% 1/4W 5% 1/4W	RV331 1-238-012-11 RES, ADJ, CARBON 1K RV501 1-238-016-11 RES, ADJ, CARBON 10K RV502 1-226-703-11 RES, ADJ, METAL GLAZE 10K RV503 1-238-019-11 RES, ADJ, CARBON 47K
R608 1-215-884-11 R609 1-207-905-00 R611 1-214-915-00 R612 1-219-137-11 R613 1-217-811-11	WIREWOUND 0.27 CARBON 120K	5% 2W 10% 2W 5% 1/2W 5% 1/4W 5% 1/4W	RV505 1-238-009-11 RES, ADJ, CARBON 220 RV801 1-238-015-11 RES, ADJ, CARBON 4.7K RV802 1-238-019-11 RES, ADJ, CARBON 47K
R614 1-216-037-00 R615 1-216-013-00 R617 1-216-354-11 R620 1-216-465-11 R621 1-216-465-11	METAL GLAZE 33 METAL OXIDE 2.7	5% 1/10W 5% 1/10W 5% 1W F 5% 2W 5% 2W	<pre></pre>
R626 A 1-216-238-91 R627 A 1-216-238-91 R628 1-218-265-11 R801 1-217-778-11 R802 1-217-819-51	METAL GLAZE 47K METAL GLAZE ATK METAL GLAZE 8.2M FUSIBLE 1K FUSIBLE 2.7K	5% 1/8W 5% 1/8W 5% 1W 5% 1W F 5% 1/4W	<spark gap=""> SG801 1-519-422-11 GAP, SPARK</spark>
R803 1-216-352-11 R804 1-216-013-00 R805 1-216-065-00 R806 1-216-049-00 R807 1-216-065-00	METAL GLAZE 33	5% 1W F 5% 1/10W 5% 1/10W 5% 1/10W 5% 1/10W	<pre> <transformer> T601 ★ 1-449-275-22 S.R.T T603 ★ 1-421-776-21 LFT T604 ★ 1-424-078-11 TRANSFORMER, TRIGGER PULSE T605 ★ 1-424-391-11 TRANSFORMER, LINE FILTER</transformer></pre>
R808 1-216-091-00 R809 1-216-689-11 R810 1-216-109-00 R811 1-216-069-00 R812 1-217-778-11	METAL GLAZE 39K METAL GLAZE 33OK METAL GLAZE 6.8K	5% 1/10W 5% 1/10W 5% 1/10W 5% 1/10W 5% 1/10W 5% 1W F	T801 1-437-090-00 HDT T802 & 1-439-416-51 TRANSFORMER ASSY, FLYBACK (UX-1650)
R813 1-212-877-11 R814 1-215-868-00	FUSIBLE 68 METAL OXIDE 680	5% 1/4W 5% 1W F	<pre><thermistor> THP601A 1-808-059-32 THERMISTOR, POSITIVE</thermistor></pre>
R816 1-247-883-00 R817 1-216-071-00 R818 1-202-830-00 R819 1-249-448-11 R820 1-217-811-11	METAL GLAZE 8.2K SOLID 10K	5% 1/4W 5% 1/10W 10% 1/2W 5% 1/4W F 5% 1/4W	<tuner> TÜ101A: 1-693-093-11 TUNER (BT-3C421)</tuner>
R821 1-216-059-00 R822 1-216-204-00 R823 1-216-077-00 R826 1-216-025-00 R827 1-216-081-00	METAL GLAZE 2.7K METAL GLAZE 1.8K METAL GLAZE 15K METAL GLAZE 100 METAL GLAZE 22K	5% 1/10W 5% 1/8W 5% 1/10W 5% 1/10W 5% 1/10W	<pre><crystal> X001 1-577-619-11 VIBRATOR, CRYSTAL X332 1-567-131-00 OSCILLATOR, CRYSTAL</crystal></pre>
R830 1-216-192-00 R850 1-215-882-00 R1301 1-216-025-00 R1302 1-216-029-00 R1303 1-216-029-00	METAL GLAZE 560 METAL OXIDE 22 METAL GLAZE 100 METAL GLAZE 150 METAL GLAZE 150	5% 1/8W 5% 2W F 5% 1/10W 5% 1/10W 5% 1/10W	<pre><terminal> YC1301 1-565-666-12 TERMINAL, S 4P ************************************</terminal></pre>
R1304 1-216-039-00 R1305 1-216-200-00 R1306 1-216-059-00 R1307 1-216-047-00	METAL GLAZE 1.2K METAL GLAZE 2.7K	5% 1/10W 5% 1/8W 5% 1/10W 5% 1/10W	*A-1638-016-A C BOARD, COMPLETE ***********************************





REF. NO. PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK
	ACITOR>	:W 501	JR4 JR6	1-216-296-00 1-216-296-00	METAL GLAZE METAL GLAZE	0	5% 5%	1/8W 1/8W	
C703 l-163-129-00 C704 l-163-007-11 C705 l-163-191-00 C706 l-163-007-11 C707 l-162-116-00	CERAMIC CHIP 330PF 5 CERAMIC CHIP 680PF 1 CERAMIC CHIP 270PF 5 CERAMIC CHIP 680PF 1 CERAMIC 680PF 1	7 50V 0% 50V % 50V 0% 50V 0% 2KV	JR7 JR8 JR12 JR13 JR14	1-216-296-00 1-216-296-00 1-216-296-00 1-216-296-00 1-216-296-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	0 0 0 0	5% 5% 5% 5%	1/8W 1/8W 1/8W 1/8W 1/8W	
	CERAMIC 0.0047MF CERAMIC CHIP 680PF 1 ELECT 10MF 2 CERAMIC CHIP 330PF 5 ELECT 1000MF 2 CERAMIC 330PF 1		JR15 JR16 JR17	1-216-296-00 1-216-296-00 1-216-296-00 1-216-296-00 1-216-487-11	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE			1/8W 1/8W 1/8W 1/8W 3W	F
C716	CERAMIC 330PF 1 CERAMIC CHIP 470PF 1 CERAMIC CHIP 470PF 1 CERAMIC CHIP 470PF 1	0% 400V 0% 50V 0% 50V 0% 50V	R705 R706	1-202-824-00 1-216-182-00 1-247-822-11 1-249-401-11 1-202-844-00	SOLID METAL GLAZE	3.3K		1/2W 1/8W 1/4W 1/4W 1/4W	
<00N	NECTOR>	20	R711	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
CNC71 *1-508-786-00 CNC72 *1-568-881-51 CNC81 *1-560-123-00 CNC82 *1-508-765-00	NECTOR> PIN, CONNECTOR (5MM PITCH) PIN, CONNECTOR 6P PLUG, CONNECTOR (2.5MM) 3P PIN, CONNECTOR (5MM PITCH)	3P	R712 R713 R714 R715	1-216-198-00 1-215-469-00 1-216-487-11 1-202-824-00	METAL	1K 100K 12K 3.3K	5% 1% 5% 10%	1/8W 1/4W 3W 1/2W	F
<d10< td=""><td>DE></td><td></td><td>R716 R717 R718</td><td>1-216-182-00 1-249-415-11 1-202-814-11</td><td>CARBON</td><td>220 680 33K</td><td>5% 5% 10%</td><td>1/8W 1/4W 1/2W</td><td></td></d10<>	DE>		R716 R717 R718	1-216-182-00 1-249-415-11 1-202-814-11	CARBON	220 680 33K	5% 5% 10%	1/8W 1/4W 1/2W	
D703 8-719-400-18	DIODE MA152WK DIODE MA152WK		R719 R720	1-216-166-00 1-216-210-00	METAL GLAZE	47 3.3K	5%	1/8W 1/8W	
D704 8-719-400-18 D705 8-719-400-18 D706 8-719-400-18	DIODE MA152WK DIODE MA152WK DIODE MA152WK		R721 R722	1-202-842-11 1-202-848-00	SOLID SOLID	220K 680K	10% 10%	1/2W 1/2W	
D707 8-719-400-18 D708 8-719-400-18	DIODE MA152WK DIODE MA152WK		R723 R724 R725	1-216-198-00 1-202-846-00 1-202-838-00	METAL GLAZE SOLID SOLID	1K 470K 100K	5% 10% 10%	1/8₩ 1/2₩ 1/2₩	
D709 8-719-400-18 D710 8-719-400-18 D711 8-719-300-33	DIODE MA152WK DIODE MA152WK DIODE RU-3AM		R726 R727	1-202-824-00 1-249-409-11	SOLID CARBON	3.3K 220	10% 5%	1/2W 1/4W	
D714 8-719-800-76 D715 8-719-800-76 D716 8-719-800-76	DIODE 100004		R728 R729 R730	1-216-347-11 1-249-416-11 1-216-166-00	CARBON METAL GLAZE	0.68 820 47	5% 5% 5%	1W 1/4W 1/8W	F
<jac< td=""><td>K></td><td></td><td>R731 R732 R733</td><td>1-216-061-00 1-216-194-00 1-216-194-00</td><td>METAL GLAZE</td><td>3.3K 680 680</td><td>5% 5% 5% 5%</td><td>1/10W 1/8W 1/8W</td><td></td></jac<>	K>		R731 R732 R733	1-216-061-00 1-216-194-00 1-216-194-00	METAL GLAZE	3.3K 680 680	5% 5% 5% 5%	1/10W 1/8W 1/8W	
J701 1-526-990-11	SOCKET, PICTURE TUBE		R734 R735	1-249-405-11 1-215-493-00	CARBON	100 1M	5% 1%	1/4W 1/4W	
<001	L>		R736 R737 R739	1-216-487-11 1-215-483-00 1-216-198-00	METAL	12K 390K 1K	5% 1% 5%	3W 1/4W 1/8W	F
L704 1-410-878-11	INDUCTOR 33UH				IABLE RESISTOR		J /16	1/0#	
< T R A	NSISTOR>		RV701	1-230-641-11			ZE 2.2	м	
Q702 8-729-230-49 Q703 8-729-906-70 Q704 8-729-200-17 Q705 8-729-230-49	TRANSISTOR 2SC2712-YG TRANSISTOR BF871 TRANSISTOR 2SA1091-0 TRANSISTOR 2SC2712-YG		RV702 RV703	1-230-619-11	RES, ADJ, MET RES, ADJ, CAR	AL GLA: BON 220	ZE 110 00	M	
Q706 8-729-906-70	TRANSISTOR BF871			*********					******
Q707 8-729-200-17 Q708 8-729-230-49 Q709 8-729-906-70 Q710 8-729-200-17	TRANSISTOR 2SA1091-0 TRANSISTOR 2SC2712-YG TRANSISTOR BF871 TRANSISTOR 2SA1091-0			*A-1645-017-A	********		(V-M2]	51V)	
<850 C	ISTOR>		Cl	<cap.< td=""><td>ACITOR></td><td>100MF</td><td></td><td>20%</td><td>16V</td></cap.<>	ACITOR>	100MF		20%	16V
JR1 1-216-296-00 JR2 1-216-296-00 JR3 1-216-296-00	METAL GLAZE 0 5% METAL GLAZE 0 5%	1/8W 1/8W 1/8W	C2 C3 C4 C5	1-163-038-00 1-124-120-11 1-163-077-00	CERAMIC CHIP (ELECT CERAMIC CHIP (0.1MF 220MF	;	20% 20% 20%	25V 16V 50V 16V

The components identified by shading and mark \hat{A} are critical for safety.

Replace only with part number specified.





REF.NO.	PART NO.	DESCRIPTION	REMAI	RK REF.NO.	PART NO.	DESCRIPTION				REMARK
C6 C7 C8 C9	1-163-038-00 1-163-235-11 1-163-235-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 22PF CERAMIC CHIP 22PF CERAMIC CHIP 22PF CERAMIC CHIP 0.1MF	25V 5% 50V 5% 50V 5% 50V	JRO3 JRO8 JRO9	1-216-295-00 1-216-295-00 1-216-295-00	METAL GLAZE METAL GLAZE METAL GLAZE	0 0 0	5% 5% 5%	1/10W 1/10W 1/10W	
C10 C11 C12 C13	1-163-038-00 1-163-038-00 1-163-038-00	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	25V 25V 25V	JR11 JR14 JR15 JR17 JR18	1-216-295-00 1-216-296-00 1-216-296-00 1-216-295-00 1-216-296-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	0 0 0 0	5% 5% 5% 5%	1/10W 1/8W 1/8W 1/10W 1/8W	
C14 C16 C17 C23	1-163-117-00 1-163-117-00 1-124-927-11	CERAMIC CHIP 100PF CERAMIC CHIP 100PF ELECT 4.7MF	20% 50V 5% 50V 5% 50V 20% 50V 25V	JR19 JR20 JR21 JR23 JR24	1-216-296-00 1-216-296-00 1-216-296-00 1-216-295-00 1-216-296-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	0 0 0 0	5% 5% 5% 5% 5%	1/8W 1/8W 1/8W 1/10W 1/8W	
C26 C27 C28 C29 C32	1-163-117-00 1-163-117-00 1-163-117-00	CERAMIC CHIP 0.1MF CERAMIC CHIP 100PF CERAMIC CHIP 100PF CERAMIC CHIP 100PF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	5% 50V 5% 50V	JR25 JR26 JR202 JR203	1-216-296-00 1-216-296-00 1-216-295-00 1-216-295-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	0 0 0	5% 5%	1/8W 1/8W 1/10W 1/10W	
C33	1-163-038-00 <con< td=""><td>CERAMIC CHIP O.IMF NECTOR> CONNECTOR, BOARD TO BOARD</td><td></td><td>JR221 JR222 R1 R2 R3</td><td>1-216-295-00</td><td>METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE</td><td>0 470 4.7K 1K</td><td>5% 5%</td><td>1/10W 1/10W 1/2W 1/8W 1/10W</td><td></td></con<>	CERAMIC CHIP O.IMF NECTOR> CONNECTOR, BOARD TO BOARD		JR221 JR222 R1 R2 R3	1-216-295-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	0 470 4.7K 1K	5% 5%	1/10W 1/10W 1/2W 1/8W 1/10W	
CNV2	*1-565-393-11 <dio< td=""><td>CONNECTOR, BOARD TO BOARD DE></td><td>Ď</td><td>R5 R6 R7</td><td>1-216-047-00 1-216-001-00 1-216-083-00</td><td>METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE</td><td>100 820 10 27K</td><td>5% 5% 5% 5%</td><td>1/10W 1/10W 1/10W 1/10W 1/10W</td><td></td></dio<>	CONNECTOR, BOARD TO BOARD DE>	Ď	R5 R6 R7	1-216-047-00 1-216-001-00 1-216-083-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 820 10 27K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	
D1 D3 D5 D6 D9	8-719-914-44 8-719-914-44 8-719-400-18	DIODE RD5.6M-B2 BIODE DAP202K DIODE DAP202K DIODE MA152WK DIODE RD6.8M-B2		R8 R9 R10 R11 R12 R13	1-216-071-00 1-216-308-00 1-218-325-11 1-218-325-11 1-218-325-11 1-216-025-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	8.2K 4.7 120 120 120 100	75 5555	1/10W 1/10W 1/4W 1/4W 1/4W 1/10W	
1C2 1C3	<10> 8-759-045-54 8-759-510-49			R14 R15 R16 R17 R18	1-216-001-00 1-216-013-00 1-216-013-00 1-216-013-00 1-216-025-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	10 33 33 33 100	5% 5%% 5%% 5%%	1/10W 1/10W 1/10W 1/10W 1/10W	
L1 L2 L3 L4		INDUCTOR 3.3UH		R19 R21 R22 R23 R40 R42	1-216-025-00 1-216-013-00 1-216-168-00 1-216-214-00 1-216-065-00 1-216-049-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 33 56 4.7K 4.7K	5%	1/10W 1/10W 1/8W 1/8W 1/10W 1/10W	
PS1		LINK> LINK, IC*(ICP-NT5):0.6A	81,4 7 414 (R49 R50	1-216-049-00 1-216-296-00	METAL GLAZE METAL GLAZE	1K 0	5% 5%	1/10W 1/8W	
0.1	<tra 8-729-900-53</tra 	NSISTOR> TRANSISTOR DTC114EK		RV1		RIABLE RESISTOR RES, ADJ, CAR				
Q1 Q2 Q3 Q4 Q5	8-729-900-93 8-729-920-92 8-729-120-28 8-729-807-87	TRANSISTOR 2SD2096-EF TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SB1295-UL6		Х1		YSTAL> CRYSTAL VIBRA	TOR			
Q6 Q7 Q9 Q10 Q11	8-729-901-01	TRANSISTOR 2SB1295-UL6 TRANSISTOR 2SB1295-UL6 TRANSISTOR DTA114EK TRANSISTOR DTC144EK TRANSISTOR DTC144EK		*****	*1-638-167-11	J1 BOARD	*****	****	******	*: *****
	<res< td=""><td>ISTOR></td><td></td><td>(2200</td><td></td><td>ACITOR></td><td>በ በ1 με</td><td>,</td><td></td><td>50 V</td></res<>	ISTOR>		(2200		ACITOR>	በ በ1 με	,		50 V
JR01 JR02	1-216-295-00 1-216-295-00	METAL GLAZE 0 5% METAL GLAZE 0 5%	1/10W 1/10W	12200	1-105-051-11	CERAMIC CHIP	U. UIMF			JJ T

KV-M2150D/M2151D RM-826



REF. NO. PART NO.

DESCRIPTION

REMARK

CONNECTOR>

CN2001*1-568-878-51 PIN, CONNECTOR 3P

<JACK>

J2201 1-562-837-11 JACK

<COIT>

L2201 1-408-409-00 INDUCTOR

10UH

MISCELLANEOUS *********

Δ 1-426-383-11 COIL, DEMAGNETIZATION
Δ 1-451-295-11 DEFLECTION YOKE (Y21PFA2)
1-452-032-00 MAGNET, DISK; 10MM φ
1-452-094-00 MAGNET, ROTATABLE DISK; 15MM φ

1-452-094-00 MAGNET, ROT 1-452-277-00 MAGNET, BMC

 $1\mbox{-}503\mbox{-}258\mbox{-}21$ SPEAKER Δ 1-590-501-11 CORD, POWER (WITH NOISE FILTER)

V901 <u>A</u> 8-738-758-05 P1CTURE TUBE (A51JXH61X)

ACCESSORIES AND PACKING MATERIALS ***********

*4-035-765-11 CUSHION (UPPER) (ASSY) *4-035-766-11 CUSHION (LOWER) (ASSY)

*4-200-680-02 INDIVIDUAL CARTON

MANUAL, INSTRUCTION (GERMAN/ENGLISH/ FRENCH/ITALIAN/DUTCH/SWEDISH) 4-200-871-11

*4-380-340-01 BAG, PROTECTION

REMOTE COMMANDER

1-693-124-11 REMOTE COMMANDER (RM-826) 4-031-670-01 COVER, POCKET (FOR RM-826)

The components identified by shading and mark A are critical for safety.

Replace only with part number specified.